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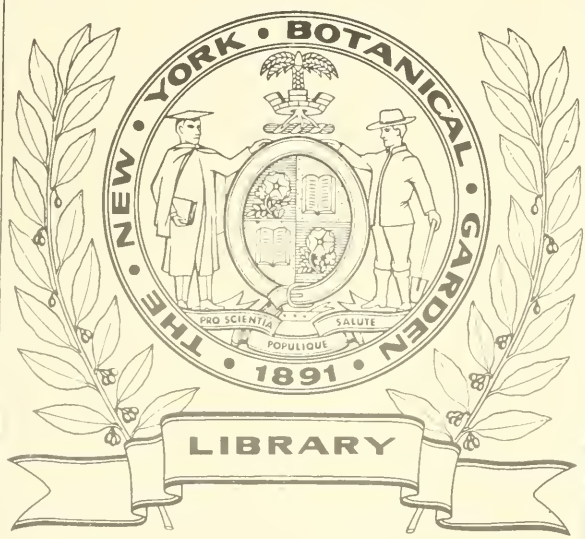

Gray Herbarium
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August 1970

FLORA OF VERMONT.

G. H. PERKINS.

HARVARD UNIVERSITY HERBARIUM.

THE GIFT OF

Sereno Watson

FROM THE TENTH REPORT OF STATE BOARD OF AGRICULTURE,

CATALOGUE

OF THE

FLORA OF VERMONT,

INCLUDING

PHÆNOGAMOUS AND VASCULAR CRYPTOGAMOUS PLANTS GROWING WITHOUT CULTIVATION.

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1888.

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FLORA OF VERMONT.

In the *Vermont Agricultural Report* published in 1882 there is *A General Catalogue of the Flora of Vermont*, which was prepared by the writer, but, through misunderstanding on the part of the state printer, the list was hastened through the press before the proof had been properly revised, and as a consequence, it contains very numerous errors. For this reason, and also because the nomenclature of the former list needed revision and other changes were advisable, the author gladly availed himself of the opportunity afforded him by the Secretary of the present Board of Agriculture to issue a list of the plants of the State that shall by reason of its greater accuracy be of greater value to botanists. Had it been possible to have had more space at his command the author would very gladly have prepared a much more full account of the flora of the State, and given more detailed notes upon the habitat, etc., of different species. As it is the following list should be regarded as provisional, to serve such use as it may until one more complete and full shall take its place.

In the former catalogue sundry species are found which were then believed to rest upon good authority, but a more careful examination of the facts has led to their rejection as, some of them certainly, and probably all, are not found in this State. These species are

Trollius laxus, Sal.
Dentaria heterophylla, Nutt.
Cerastium vulgatum, L.
Geranium dissectum, L.
Hydrangea arborescens, L.
Myriophyllum verticillatum, L.
Epilobium alpinum, L.
Vernonia Noveboracensis, Wild.
Gaylussaccia frondosa, T and G.
Azalea viscosa, L.
Phlox subulata, L.
Juglans nigra, L.
Betula pumila, L.
Betula glandulosa, Mx.
Pinus mitis, Mx.
Cupressus thyoides, L.
Cyperus filiculmis, Vahl.
Scirpus sylvaticus, L.
Rhynchospora fusca, R and L.
Carex bullata, Sch.
Carex striata, Mx.
Carex trichocarpa, Muhl.
Poa alpina, L.
Isoetes lacustris, L.

A few other species which are regarded as more or less uncertain are given with the authority upon which they rest and are marked as doubtful.

The genera are arranged substantially as given in Hooker and Bentham's GENERA PLANTARUM. The Polypetalae are named as in Watson's INDEX TO NORTH AMERICAN BOTANY, and the Gamopetalae are arranged as in the SYNOPTICAL FLORA, 2d ed. In some cases, as indicated by foot notes, more recent revisions of some of the genera have been followed, as has Dr. Vasey's GRASSES OF THE UNITED STATES for Gramineæ and Bailey's SYNOPSIS OF NORTH AMERICAN CARICES, (*Proc. Am. Acad. Vol. XXII, pp.* 59-151,) for the genus Carex.* In all cases in which the name given in Gray's Manual has been changed, the old name follows in parenthesis. Aside from very important assistance rendered directly by individuals, as indicated on a following page, the materials chiefly used in the preparation of this list are Oakes' CATALOGUE OF PLANTS, published in 1842 in THOMPSON'S VERMONT; Prof. J. Torrey's continuation of the same list, published in 1853, in the APPENDIX TO THOMPSON'S VERMONT; a brief manuscript list of plants found in Southern Vermont, prepared not long before his death by Mr. C. C. Frost, of Brattleboro; and the herbarium of the University of Vermont collected largely by Prof. Joseph Torrey.

The flora of Vermont has long been attractive to botanists, and from the time of Pursh, who collected about Mansfield and elsewhere in 1807, to the present time the State has, from time to time, been more or less fully explored. Oakes tells us that the earliest list which can be regarded as giving anything like a full account of Vermont plants as then known, is that of Dr. E. James, which contains 569 species, mostly from the immediate vicinity of Middlebury. Dr. James prepared this list, as President E. Brainerd tells me, in his earlier manhood and before he had acquired the botanical skill to which he afterwards attained, and, although of great value, it nevertheless must be used with care, as it contains undoubted errors. This list was published in Hall's STATISTICAL ACCOUNT OF THE TOWN OF MIDDLEBURY. During the year 1820, Dr. J. W. Robbins, of Uxbridge, Mass., made several expeditions through portions of the State, and collected many species of plants. In 1831, John Carey moved to Bellows Falls, and for some years after studied the botany of Vermont very diligently. While in college at Burlington, 1835-1839, W. F. Macrae—and about the same time, as well as later, —Prof. Edward Tuckerman, of Amherst, Mass., added much to the knowledge of the botany of the State by their explorations. Mr. William Oakes, of Ipswich, Mass., whose list has been mentioned, brought together in that work many of the results of the labors of those named, as well as his own. Later, Prof. Torrey at Burlington, and Mr. Frost at Brattleboro, continued the investigation of our flora while, during the last ten years, undoubtedly the most thorough scrutiny of many portions of Vermont

*See also list of corrections, Torrey Bulletin, XII, p 261.

which they have ever received, has been made by Mr. C. G. Pringle of Charlotte, through whose labors a considerable number of species new not only to this State, but to the United States, have been made known. President Ezra Brainerd, of Middlebury College, has also done very much to increase the knowledge of Vermont botany, by his extended and thorough investigations, carried on especially in Addison county, and, while disclaiming for these two gentlemen any responsibility for whatever errors the following list contains, I would in simple justice acknowledge very gratefully their constant and most important assistance throughout its preparation. Very much of the accuracy and value of the list is due to their co-operation. To Prof. H. G. Jessup, of Hanover, N. H., and Dr. F. Blanchard, of Peacham, Vt., I am greatly indebted for information respecting the plants of the Connecticut River valley. Rev. Thomas Morong has very kindly given assistance in the nomenclature of the Niadaceae and other groups in which he is an especial authority. Acknowledgements are also due to Mr. F. H. Hosford, of Charlotte, Rev. J. A. Bates, of Williston, Mr. F. H. Herrick, and Mr. Lucius Bigelow, for notes concerning numerous species. In some cases definite localities are given, not because the species is found nowhere else, but for the benefit of botanists who may wish to collect or study the plants.

Several botanical areas are found within the limits of Vermont. In the Champlain Valley there is a considerable group of western species not found elsewhere in New England. Canadian plants cross the border and find congenial situations in the northern counties and, scattered over the state most of the usual New England plants, with the exception of those requiring a seaside habitat, may be found, while the summits of the higher mountains afford suitable conditions for the growth of a small group of Alpine plants, some of which are of much interest. While, as has been indicated, some portions of Vermont have been very carefully explored, it is yet true that other portions still wait for the botanist who shall thoroughly examine them and, although the total area of the state is small as compared with most other states, we may feel confident that future investigations will add no inconsiderable number of species to the present list. This is probably especially true of the southern and southwestern part of the state, for a number of species are reported from Massachusetts and New York, some of them growing near the Vermont border, which should be found this side of it, but which have not yet been reported by our botanists. Vermont abounds in small lakes and ponds, many of which have never been explored by botanists with any degree of completeness, and this may also be said of numerous mountain sides, ravines, gorges and ledges. On the other hand a decrease in species must be expected from the extinction of some of the plants forming what may be regarded as the original flora of the state. A marked change is already taking place in the Willoughby region, long renowned among lovers of rare plants, and it is probable that through

the removal of the forests and other "improvements" the fame of that region will ere long depart. The same is true of other areas, indeed, wherever the woods are being cut away, the swamps drained, and similar changes going forward, it must follow that the botanical riches of the region diminish. Another change in the flora is going on here as elsewhere because of the introduction of western and other plants in grass seed. Even during so short a period as the last ten years there has been a marked change in the aspect of many acres of meadow and grass land as Rudbeckias, Hieraciums, and similar plants have not only appeared, but so increased as when in bloom to change the appearance of the fields in which they have become located. In a much less degree the flora is increased by the escape from gardens from time to time of species which are able to care for themselves and lead a sort of vagrant life by roadsides or about dwellings. In these ways our flora is changing and on the whole increasing. In Oakes' catalogue of 1842 there are enumerated 929 species, to which Prof. Torrey's list of 1853 adds 105 species, making in all 1034. Quite a number of these must be erased as erroneous, either in identification or classification, so that if the list were revised according to the views of the botanist of to-day, it would not contain many more than 1000 species. The present list contains 1360 species and varieties included in 479 orders. The species are found in the following great groups: Polypetalæ, 372; Gamopetalæ, 360; Apetalæ, 133; Monocotyledons, 409; Gymnospermæ, 15; Pteridophytes, 72. 184 of the species are trees or shrubs, 110 are introduced and are distinguished by the use of small capitals in printing the names.

For the convenience of botanists wishing to compare our flora with that of other regions, the statistics of a few of the larger orders and genera are added in the following tables, varieties being included in species:

Order.	Genera	Native Species	Total Species	Order.	Genera	Native Species	Total Species
Cyperaceæ	10	153	153	Scrophulariaceæ	13	28	32
Compositæ	35	105	124	Polygonaceæ	3	22	29
Gramineæ	46	96	113	Liliaceæ	17	27	28
Rosaceæ	14	50	55	Salicaceæ	2	19	26
Orchidaceæ	15	44	44	Naidaceæ	3	22	22
Ericaceæ	18	39	39	Caryophyllaceæ.	10	11	21
Labiatæ	21	32	38	Umbelliferæ	14	19	20
Leguminosæ	14	29	38	Caprifoliaceæ	7	18	19
Cruciferæ	15	21	36	Juncaceæ	2	18	18
Ranunculaceæ	10	31	33	Saxifragaceæ	6	16	17

The number of species in each of twenty most numerous genera is as follows :

Genera.	Native Species.	Whole Number of Species.	Genera.	Native Species.	Whole Number of Species.
Carex	109	109	Ranunculus	10	12
Aster	26	26	Panicum	8	11
Solidago	22	23	Poa	8	9
Potamogeton	20	20	Asclepias	9	9
Polygonum	18	20	Rumex	5	9
Salix	14	19	Quercus	8	9
Juncus	15	15	Anemone	8	8
Viola	14	15	Viburnum	8	8
Scirpus	14	14	Hypericum	7	8
Habenaria	12	12	Veronica	7	8

Catalogue of Plants.

DICOTYLEDONS.

RANUNCULACEÆ.

1. Clematis, L.

C. **verticillaris,** D. C. Purple Clematis, Atragene.
Nowhere abundant, but found in several localities near Burlington. Also at Lake Dunmore, Brainerd; Windsor, Leland, and in other places.

C. **Virginiana,** L. Common Clematis.
Common along streams and in damp places.

C. **viorna,** L.
This is reported in Appendix to Thompson's Vermont as "found at Castleton, by Mrs. J. Carr." Mr. C. C. Frost found it abundantly on the New Hampshire side of the Connecticut river, opposite Brattleboro, but it is doubtfully a Vermont plant.

2. Anemone, L. Anemone.

A. **multifida,** D. C. Not uncommon near Burlington.
A. **cylindrica,** Gray. Sparingly in many localities.
A. **Virginiana,** L. Common.
A. **Virginiana,** Var **alba** Wood. Common.
A. **dichotoma,** L. (*A Pennsylvanica, L.*) Common.
A. **nemorosa,** L. Our most common species,
A. **hepatica,** L. (*Hepatica triloba, Ch.*) Liverwort. very Common.
A. **acutiloba,** Law. (*Hepatica acutiloba, D. C.*) Common.

3. Anemonella, Spach*

A. **thalictroides,** Sp. (*Thalictrum anemonoides, Mx.*) Woods chiefly in Southern Vermont. Not common.

4. Thalictrum, Tourn.

T. **dioicum,** L. *Early Meadow Rue.* Common in damp soil.
T. **cornuti,** L. *Tall Meadow Rue.* Damp Meadows, Common.

*Dr. Gray in Botanical Gazette, xi., 39.

5. RANUNCULUS, L.

R. aquatilis, L. var. trichophyllus, Gray White Water Crowfoot. Not very common. Ponds and sluggish streams.
R. circinatus, Sibth. (*R. divaricatus Schr.*) Water Crowfoot. Windsor, Leland, Peacham, Blanchard.
R. multifidus, Pursh. Yellow Water Crowfoot. Common.
R. Flammula, L. var. reptans, Meyer.
Lake Champlain and larger streams.
R. abortivus, L. Common.
R. sceleratus, L. Wet places, not common.
R. recurvatus, Poir. Moist hillsides.
R. Pennsylvanicus, L. Swamps and wet ground. Common.
R. fascicularis, Muhl. Early Crowfoot Dry soil, not common.
R. septentrionalis, Poir. (R. repens in part.) Not common.
R. BULBOSUS, L. Hillsides—not uncommon in some places.
R. ACRIS, L. Common Buttercup. Very abundant.

6. CALTHA, L. Marsh Marigold, Cowslip.

C. palustris, L. Wet fields and swamps, very common.

7. COPTIS, Salisb. Gold thread.

C. trifolia, Salisb. Common in clearing and edges of groves.

8. AQUILEGIA, Tourn. Columbine. Honey suckle.

A. Canadensis, L.
Common. Sometimes found with white flowers.
A. vulgaris, L. Escaped from cultivation.

9. ACTÆA.

A. spicata, L. var. rubra, Mx. Red Cohosh.
Wooded hillsides, not abundant.
A. alba, Big. White Cohosh.
More common than the preceeding.

10. CIMICIFUGA, L. Snake-root.

C. racemosa, Ell. Rocky woods, rare.

MAGNOLIACEÆ.

11. LIRIODENDRON, L. Tulip Tree. Whitewood.

L. tulipifera, L. Found only in Southern Vermont.

MENISPERMACEÆ.

12. MENISPERMUM, L. Moon-seed.

M. Canadense, L. Common, especially northward.

BERBERIDACEÆ.

13. BERBERIS, L.

B. vulgaris, L. Common Barberry.
In old pastures. Not common.

14. Caulophyllum, Mx. Pappoose-root.

C. thalictroides, Mx. Common.

15. Podophyllum, L. May Apple.

P. peltatum, L. Southern portion of the State. Not common except in a few localities.

NYMPHÆACEÆ.

16. Brasenia, Sch. Water Shield.

B. peltata, Pursh. Not generally common.

17. Nymphæa, Tourn. Pond-lily.

N. odorata, A. Common in ponds.

N. odorata. var. minor, Sims.
Ponds and slow flowing streams.

N. tuberosa, Paine.
"Common in Lake Champlain and tributaries."—Brainerd.

18. Nuphar, Smith. Yellow Water-lily.

N. advena, Ait. Common Yellow Lily. Abundant.

N. rubrodiscum, Morong. (*Bot Gazette, XI, p* 164.)
Mouth of Missisquoi, Jessup, Otter Creek and Lake Champlain. Pringle, Brainerd.

N. Kalmianum, Ait. (*N. pumilum Cas.*)
Lake Champlain, ponds and streams.

SARRACENIACEÆ.

19 Sarracenia, Tourn. Pitcher Plant. Side saddle Flower.

S purpurea, L. Common in swamps.

PAPAVERACEÆ.

20. Papaver, L. Poppy.

P. dubium, L.
This is sometimes found growing spontaneously in cultivated grounds, but is not persistent.

21. Chelidonium, L Celandine.

C. majus, L. Not uncommon about dwellings.

22. Sanguinaria, Dill. Blood-root.

S. Canadensis, L.
Not very common in the western part of the State but abundant in the Connecticut river valley.

FUMARIACEÆ.

23. Adlumia, Raf. Mountain Fringe.

A. cirrhosa, Raf.

Not common, but found in numerous localities especially in the Champlain valley, Middlesex, Brainerd; Burlington, Perkins; Castleton, and West Haven, Robbins; Ludlow, Washburn; Windsor, et.al., Jessup.

24. Dicentra, Bork. Squirrel corn.

D. cucullaria, DC.
Not very common, though more so than the next.
D. Canadensis, DC. Not common in most parts of the State.

25. Corydalis, Vent.

C. glauca, Pursh. Not rare. In most parts of the State more common than the next.
C. aurea, Willd. Not very common.

26. Fumaria, L.

F. officinalis, L. Not very common.

CRUCIFERÆ.

27. Draba, DC.

D. arabisans, Mx.
Shores and islands of Lake Champlain, Cliffs near Willoughby Lake; Snake Mountain and Bristol, Brainerd. Rare.
D. incana, L. Willoughby Mountain, Tuckerman, H. Mann.
D. verna, L. Willoughby Lake. Wood.

28. Nasturtium, R. Br. Cress.

N. palustre, DC. Watercress. Common in wet places.
N. palustre, var. hispidum, F. and M. Borders of Ponds
N. lacustre, Gray. Borders of Otter Creek.
N. sylvestre, R. Br. "Abundant in Norwich and along Connecticut river" Jessup.
N. Armoracea, Fries. Horseradish. Escaped from cultivation.

29. Dentaria, L. Pepper-root.

D. diphylla, L. Common in Connecticut river valley. Not common in western Vermont.
D. maxima, Nutt. Near Burlington, also other places, rare.
D. laciniata, Muhl. More common than the other species.

30. Cardamine, L. Cress.

C. rhomboidea, DC. Not common.
C. hirsuta, L. Wet places.
C. hirsuta. var. sylvatica, Gray.
Hillsides. Snake mountain, Brainard.
C. pratensis, L.
Chiefly found in northern Vermont, Middlebury, Brainerd.

31. Arabis, L. Rock Cress.

A. **hirsuta,** Scop. Common in wet places.
A. **lævigata,** DC. Not common. Rocky soil.
A. **Canadensis,** L. Winooski river, Colchester, Torrey.
A. **perfoliata,** Law. Rocky soil. Southern part of the state.
A. **Drummondii,** Gray. Peacham, Blanchard; Snake mountain, and common along Lake Champlain, Brainerd.

32. Barbarea, R. Br. Winter Cress.

B. **vulgaris,** R. Br. Meadows. Rather common.
B. **vulgaris,** var. **arcuata,** Koch. Barnet, Blanchard.

33. Erysimum, L.

E. **cheiranthoides,** L.
Brattleboro, C. C. Frost. Middlebury, Brainerd.

34. Sisymbrium, L. Hedge Mustard.

S. officinale, Scop. Common.
S. Thaliana, Gaud. Less common than the first.
S. **humile,** Meyer. (*Arabis petraea*, Lam.) Willoughby mountain.

35. Brassica, Tourn. Mustard.

B. Sinapistrum, Bois.
Abundant in grain fields about Middlebury, Brainerd.
B. nigra, Koch. Common on cultivated ground.
B. campestris, L. Richmond, C. G. Pringle. Abundant about Peacham, Blanchard.

36. Camelina, Crantz

C. sativa, Crantz. Old fields. Common.

37. Capsella, Vent. Shepard's Purse.

C. Bursa-pastoris, Mænch. A common weed.

38. Thlaspi, Tourn. Cress.

T. arvense. Monkton, Pringle; Pomfret, A. P. Morgan; Middlebury, Brainerd.

39. Lepidium, L. Pepper Grass

L. **Virginicum,** L. Not very common.
L. ruderale, L. Dry soil. Rutland, Pringle; near lake shore, Burlington. Common in some places.

40. Raphanus, L. Radish.

R. Raphanistrum, L. Old fields; not common.

41. Isatis.

I. tinctoria, L. Banks of Winooski river, near Burlington.

CAPPARIDACEÆ.

42. POLANISIA, Raf.

P. graveolens, Raf. Sandy shores of Lake Champlain. Common.

CISTACEÆ.

43. HELIANTHEMUM, Tourn.

H. Canadense, Mx. Rock Rose. Not uncommon.

44. HUDSONIA, L.

H. tomentosa, Nutt. Quite abundant on the sandy shore of Lake Champlain north of Burlington at Porter's Point and Colchester Point.

45. LECHEA, L.

L. major, Mx. Pin-weed. Common on dry soil.
L. minor, Wall. Common.

VIOLACEÆ.

46. VIOLA.* Violet.

V. rotundifolia, Mx. Yellow Violet.
Common in woods along the Green Mountains.
V. blanda, L. White Violet. Meadows. Very common.
V. blanda, L. var. renifolia, Gr. (*V. renifolia, Gr.*) Common in woods and swamps. Addison county; Norwich, Jessup.
V. Selkirkii, Gold. Cedar swamps and mountain woods.
V. palmata, L. Blue Violet. Less common than the variety.
V. palmata, L. var. cucullata, Gray. (*V. cucullata, Ait.*) Common Blue Violet. Very abundant in wet places.
V. sagitatta, Ait. Blue Violet. Rocky woods.
V. pedata, L. Bird foot Violet. Brattleboro, Frost.
V. canina, L. var. Muhlenbergii, Gray. (*V. canina, var. sylvestris*, Reg.) Not common.
V. rostrata, Pursh. Spurred Violet.
Addison county, Brainerd, and elsewhere.
V. striata, Muhl. Shaded hillsides about Burlington.
V. Canadensis, L. Common.
V. pubescens, Ait. Yellow Violet. Common.
V. pubescens, Ait. var. eriocarpa, Nutt. Common.
V. TRI-COLOR, H. var. ARVENSIS, H. Common Pansy. Escaped from gardens.
V. lanceolata, L. and V. primulaefolia, L. These should be found in southern Vermont.

POLYGALACEÆ.

42. POLYGALA, Tourn.

P. verticillata, L. Near Bellows Falls, not common.

*Revision of N. A. Violets, Dr. Gray, Bot. Gazette, XI, pp. 253-289.

P. ambigua, Nutt. Not common.
P. sanguinea, L. "Windsor Leland," Jessup. Not common.
P. Senega, L. Seneca Snake Root. Not common.
P. polygama, Walt. Common.
P. paucifolia, Willd. Twin Sisters. Fringed Polygala. Common.

CARYOPHYLLACEÆ.

43. Dianthus, L. Pink.

D. Armeria, L. Not very abundant.

44. Saponaria, L. Bouncing Bet.

S. officinalis, L. Common by roadsides and about old buildings.

45. Silene, L. Catch-fly.

S. inflata, Sm. Common in some localities.
S. antirrhina, L. Not common.
S. noctiflora, L. Common.

46. Lychnis. Corn Cockle.

L. vespertina, Sib. Peacham, rare. Blanchard.
L. Githago, Lam. Not common. Basin Harbor. Perkins.

47. Cerastium, L. Mouse-ear Chickweed.

C. viscosum, L. Common everywhere.
C. arvense, L.
Monkton, C. G. Pringle. "Rocky pastures north of Windsor," Flint. Snake Mountain, Brainerd.
C. nutans, Raf. Moist places.

48. Stellaria, L. Chickweed.

S. media, Sm. Common Chickweed.
S. longifolia, Muhl. Common.
S. borealis, Big. Mountains.
S. graminea. Monkton, C. G. Pringle. Middlebury, Brainerd.

49. Arenaria, L.

A. serpyllifolia, L. Sandwort. Sandy soil.
A. Michauxii, Hoff. (*A. Stricta, Mx.*) Cliffs. Common.
A. verna, L. Var. hirta. Fenz. Smuggler's Notch, Pringle. Nearly extinct.
A. Grœnlandica, Sp. Mountain summits. Common.
A. lateriflora, L. Damp woods.

50. Sagina.

S. procumbens, L. Pearl wort.
Brattleboro, Frost. Peacham, Blanchard.

51. Spergula, L.

S. arvensis, L. Grain fields.

PARONYCHIEÆ.

52. Anychia, Mx.

A. dichotoma, Mx. Rocks near Burlington, not common.

PORTULACACEÆ.

53. Portulaca, Tourn.

P. oleracea, L. Purslane. Far too common.

54. Claytonia, L. Spring Beauty.

C. Virginica, L. Not common.
C. Caroliniana, Mx. More common than the first.

HYPERICACEÆ.*

55. hypericum, L. St. Johnswort.

H. Ascyron, L. (*H. pyramidatum, Ait.*) Not common. Middlebury, Brainerd. Burlington, Perkins.
H. ellipticum, Hook. Common.
H. perforatum, L. Common.
H. maculatum, Wall. (*H. corymbosum*, Muhl.) Common.
H. mutilum, L. Common in Eastern Vermont.
H. multilum, L., var. gymnanthum. Gray. St. Albans Bay, Brainerd.
H. Canadense, L. Not common. Barnet, Blanchard.
H. Sarothra, Mx. Brattleboro, Frost.

56. Elodes. Adans.

E. campanulata, Pursh. (*Elodes Virginica*, Nutt.) Swamps, common.

MALVACEÆ.

57. Malva, L. Mallow.

M. rotundifolia, L. Common in door yards everywhere.
M. sylvestris, L. Occurs sparingly in many places.
M. moschata, L. Established in Peacham, Blanchard.
M. crispa, L. Peacham, rare, Blanchard. Middlebury, common weed in many gardens, Brainerd.

58. Abutilon, Tourn. Velvet Leaf.

A. Avicennæ, Gært. Waste places, not common.

*(Revision of N. A. Hypericeæ, Coulter, Botan. Gaz. XI, pp. 78-106.)

TILIACEÆ.

59. Tilia, L. Linden. Basswood.

T. Americana, L. Common.

LINACEÆ.

60. Linum, L. Flax.

L. Virginianum L. Dry woods. Pownal, Robbins.
L. usitatissimum, L.
Old fields. Grows spontaneously, but is not persistent.

GERANIACEÆ.

61. Geranium, L. Cranesbill.

G. maculatum, L. Common.
C. Carolinianum, L. Not very common.
G. Robertianum, L. Not rare.

62. Erodium, L'Her.

E. cicutarium, L. Ludlow, Miss Pollard. A garden weed.

63. Flœrkea, Willd.

F. proserpinacoides, Willd. Shelburne, Pringle.

64. Oxalis, L. Sorrel.

O. Acetosella, Pink Oxalis. Mountain woods. Common.
O. violacea, L. Cavendish, Dr. Graves.
O. corniculata, L., var. stricta, Sav. (*O. stricta*, *L.*.)
Common Yellow Sorrell.

65. Impatiens, L. Balsam. Ladies Jewels.

I. pallida, Nutt. Less common than the next species.
I. fulva, Nutt. Common in wet places.

RUTACEÆ.

66. Xanthoxylum, Cald. Prickly Ash.

X. Americanum, Mill. Not common.

ILICINEÆ.

(Aquifoliaceae.)

67. Ilex, L. Black Alder.

I. verticillata, Gray. Swamps. Not Common.
I. lævigata, Gray. Not common.

68. Nemopanthes, Raf. Mountain Holly.

N. Canadenses, D. C. Damp woods and swamps.

CELASTRACEÆ.

69. Celastrus, L. Bittersweet.

C. scandens, L.
Common throughout the state especially in rocky soil.

70. Euonymus. Burning Bush.

E. atropurpureus, Jacq. Common in cultivation, wild in Canada, and may be found wild in Vermont.

RHAMNACEÆ.

71. Rhamnus. Buckthorn.

R. cathartica, L. Not Common.
R. alnifolia, L'Her. Swamps.

72. Ceanothus.

C. Americanus, L. Common in dry soil.
C. ovatus, Desf. (*C. Ovalis, Big,*)
Common near Burlington on sandy shores of Lake Champlain.

VITACEÆ.

73. Vitis. Grape Vine.

V. Labrusca, L. (Fox Grape) Thickets. Common. Sharon and elsewhere, Jessup, probably introduced.
V. æstivalis, Mx. Common.
V. riparia, Mx. (Frost Grape.)
Common along river banks and elsewhere.
V. cordifolia, Mx. This species is reported from this State, but its occurrence is very doubtful.

74. Ampelopsis. Woodbine.

A. quinquefolia, Mx. Very common.

SAPINDACEÆ.

75. Staphylea, L. Bladder Nut.

S. trifolia, L. Not common.

76. Acer, Tourn. Maple.

A. Pennsylvanicum, L. Moose Wood. Common.
A. spicatum, Lam. Mountain Maple.
Common on rocky hillsides.
A. saccharinum, Wang. Sugar Maple. Common.
A. saccharinum, var. nigrum, Gray.
Less common than the species. Middlebury, Brainerd
A. dasycarpum, Ehrh. White Maple.
Not very common in most parts of the state.
A. rubrum, L. Red Maple. Swamps. Not uncommon.

77. Negundo, Mœnch. Box Elder.

N. aceroides, Mœnch. Not common.

78. Æsculus, L.

Æ. Hippocastanum, L. Horse Chestnut. This has in some places escaped from cultivation and become established.

ANACARDIACEÆ.

79. Rhus, L. Sumach.

R. typhina, L. Hillsides. Common.
R. glabra, L. Hillsides. Less common.
R. copallina, L. Not common. Salisbury, Brainerd.
R. venenata, D. C. Poison Sumach. Swamps. Not common.
R. Toxicondendron, L. Poison Ivy. Common.
R. aromatica, Ait. Not common. Snake Mountain, Brainerd.

LEGUMINOSÆ.

80. Lupinus, Tourn. Lupine.

L. perennis, L.
Common on sandy soil—sometimes with white flowers.

81. Medicago, L.

M. sativa, L. Lucerne.
Pomfret, Morgan. Peacham, Blanchard. Middlebury, Brainerd.
M. lupulina, L. South Hero. Middlebury, Brainerd.

82. Melilotus, Tourn. Sweet Clover.

M. officinalis, Lam. Yellow Sweet Clover. Not common.
M. alba, Lam. White Sweet Clover.
Common along railroad embankments and roadsides.

83. Trifolium, L. Clover.

T. arvense, L. Rabbit-foot Clover. Dry fields. Not common.
T. pratense, L. Common Red Clover.
T. stoloniferum, Muhl. Running Clover.
Bellows Falls, Mrs. Brown.
T. repens, L. Common White Clover.
T. agrarium, L. Yellow Hop Clover. Common.
T. procumbens, L. Hop Clover. Not common.
T. hybridum, L. Alsike.
Naturalized everywhere, and becoming very common.

84. Robinia, L. Locust.

R. Pseudacacia, L. Common Locust.
Escaped from cultivation in many places.
R. viscosa, L. Rose Acacia.
Also in a few places escaped from cultivation.

85. Astragalus, L.

A. Canadensis, L. Not common. Shore of Lake Champlain.
A. alpinus, L. Mountain sides, Northern Vermont; Bellows Falls, Mrs. Brown; Barnet, Blanchard. Rare.
A. Robinsii, Gray. Near Burlington; also at Hartland, and near Hanover, N. H. Occurs only in very limited localities.

86. Hedysarum, Tourn.

H. boreale. Willoughby Mountain, Wood. Smugglers Notch, Sterling Mountain, Pringle, Perkins. Rare.

87. Desmodium, D. C. Tick Trefoil.

D. nudiflorum, D. C. Common.
D. acuminatum, D. C. Dry woods. Common.
D. rotundifolium, D. C. Williston, Bates. Not common.
D. canescens, D. C. Dry soil. Not rare.
D. Dillenii, Darl. Chiefly found in Southern Vermont.
D. paniculatum, D. C.
D. Canadense, D. C. Common along streams.

88. Lespedeza, Mx. Bush Clover.

L. repens, T. & G. Barton. Brattleboro, Frost.
L. violacea, Pers. Dry Woods.
L. hirta, Ell. Dry soil. Colchester, Robbins.
L. capitata, Mx. Pastures. Common.

89. Vicia, Tourn. Vetch.

V. sativa, L. Not very common.
V. sp.? A Vicia with small white flowers, was found growing on Providence Island in July of this year, 1888. It appears to be a small form of the preceding.
V. Cracca, L. Very common in some grass lands.
V. tetrasperma, L. Knights Island, Lake Champlain, Brainerd.

90. Lathyrus, L.

L. maritimus, Bigel. Shores of Lake Champlain. Not common.
L. ochroleucus, Hook. Rare in most places, but abundant on bluffs on Lake Champlain and on some of the islands.
L. palustris, L. Sandy shores of Lake Champlain.
L. palustris, var. myrtifolius. Gray. Not common.

91. Amphicarpæa, Ell. Ground Nut.

A. monoica, Nutt. Common in damp thickets.

92. Apios, Boer. Ground Nut.

A. tuberosa, Moen. Common; especially fine and abundant along the banks of the Missisquoi below Swanton.

93. Cassia, L. Senna.

C. Marilandica, L. Not common. Confined to the outhern part of the State. Norwich, Jessup; Orwell, Brainerd.

ROSACEÆ.

94. Prunus, Tourn. Plum. Cherry.

P. **Americana,** Marsh. Wild Plum.
Common, especially in Northern Vermont.
P. **pumila,** L. Dwarf Cherry.
Rocky shores of Lake Champlain. Islands and banks of the Connecticut River; Jessup, Blanchard.
P. **Pennsylvanica,** L. Wild Red Cherry. Common.
P. **Virginiana,** L. Choke Cherry. Common.
P. **serotina,** Ehr. Black Cherry. Common.

95. Spiræa, L. Meadow Sweet. Spiræa..

S. **salicifolia,** L. Common.
S. **tomentosa,** L. Hardhack.
Common in some localities, rare in others.
S. **lobata,** Murr. Queen of the Prairie.
Apparently naturalized in a wet place by the roadside north of East Randolph. Perkins.

96. Dalibarda, L.

D. **repens,** L. Common in damp woods.

97. Rubus, Tourn. Blackberry. Raspberry.

R. **odoratus,** L. Flowering Raspberry.
Abundant along forest roads and mountain sides.
R. **triflorus,** Rich. Dwarf Raspberry.
Not common. Moist woods.
R. **strigosus,** Mx. Red Raspberry. Very common.
R. **occidentalis,** L. Black Raspberry.
Common, though less so than the preceding.
R. **villosus,** Ait. High Blackberry. Common.
R. **Canadensis,** L. Low Blackberry.
Less common than the preceding.
R. **hispidus,** L. Running Blackberry. Not very common.

98. Geum, L.

G. **album,** Gmel. Not common. Borders of groves.
G. **Virginianum,** L Middlebury, Brainerd.
G. **macrophyllum,** Willd.
Mt. Mansfield, Pringle, Bates; Ripton, Brainerd.
G. **strictum,** Ait. Low grounds. Not common.
G. **rivale,** L. Swamps. Rather common.

99. Waldsteinia, Willd. Barren Strawberry.

W. **fragarioides,** Traut. Very common.

100. Fragaria, Tourn. Strawberry.

F. **Virginiana,** Ehrh. Very common in fields.
F. **vesca,** L. Not as common. Rocky woods.

101. Potentilla, Cinquefoil.

P. **Norvegica**, L. Common.
P. **Canadensis**, L. Common Cinquefoil.
Dry pastures. Very common.
P. **argentea**, L. Silver Weed. Common.
P. **arguta**, Pursh. Dry soil. Common.
P. **Anserina**, L. Silvery Cinquefoil.
Shores of Lake Champlain. Common.
P. **fruticosa**, L. Shrubby Cinquefoil.
Not common generally. Very common about Manchester, F. H. Herrick.
P. **tridentata**, Ait. Mountain Cinquefoil.
Summits of higher mountains. Common.
P. **palustris**, Scop. Marsh Cinquefoil.
Swamps. Rare. Ripton, Brainerd.

102. Agrimonia, Tourn.

A. **eupatoria**, L. Rather common in moist places.

103. Poterium.

P. **Canadense**, Gray. Swamps. Brattleboro, Frost.

104. Rosa, Tourn. Wild Rose.

R. **blanda**, Ait. Common.
R. **Carolina**, L. Swamp Rose. Low ground. Common.
R. **lucida**, Ehr. Small Wild Rose.
Shores of Lake Champlain. Not common.
R. rubiginosa, L. Sweet Brier.
Rocky pastures. Not common in most places.
R. Cinnamomea, L. Cinnamon Rose.
Established about old dwellings.

105. Pirus, L.

P. Malus, L. Common apple.
Seedlings often become established in old pastures, etc.
P. **arbutifolia**, L. Choke-berry. Common in dry woods.
P. **arbutifolia**, L. var. **melanocarpa**, Gray. Borders of swamps.
P. **arbutifolia**, L. var. **erythrocarpa**, Gray.
P. **Americana**, D. C. Mountain Ash.
Mountain sides. Common.
P. **sambucifolia**, C. & S. Mt. Mansfield, Pringle.
P. Aucuparia, Gaert. Naturalized about Peacham, Blanchard.

106. Cratægus, L. Hawthorn.

C. oxyacantha, L. English Hawthorn.
Common about Peacham, Blanchard.
C. **coccinea**, L. Scarlet Thorn. Common.
C. **tomentosa**, L. Black Thorn.
Chiefly found in Southern Vermont.
C. **tomentosa**, L. var. **punctata**, Gray. Not common.

C. Crusgalli, L. Cockspur Thorn. Not rare.

107. Amelanchier, Med. Shad Bush.

A. Canadensis, T. & G. including var. Botryapium,
Common throughout the State.
A. Canadensis, var. oblongifolia, Gray. Less common.
A. Canadensis, var. rotundifolia, Gray. Not rare.
A. Canadensis, var. oligocarpa, Gray.
Camels Hump, Horsford; Peacham, Blanchard.

SAXIFRAGACEÆ.

108. Saxifraga, L. Saxifrage.

S. oppositifolia, L. Willoughby Lake, Wood; Smugglers Notch, Mt. Mansfield, Pringle, Bates.
S. aizoides, L.
Willoughby Lake, Wood; Smugglers Notch, Pringle, Bates.
S. Aizoon, Jacq. Mt. Mansfield, Pringle; Sterling mountain, Perkins, Lockwood.
S. Virginiensis, Mx. Common.
S. Pennsylvanica, L. Swamps. Not common.

109. Mitella, Tourn. Mitre Flower.

M. diphylla, L. Common on rocky slopes.
M. nuda, L. Less Common. Swampy woods.

110. Tiarella, L.

T. cordifolia, L. Abundant on moist banks.

111. Chrysosplenium, Tourn.

C. Americanum, Sch. Cool brooks. Common.

112. Parnassia, Tourn.

P. Caroliniana, Mx.
Wet places near Burlington. Norwich, Jessup. Not common.

113. Ribes, L. Currant. Gooseberry.

R. Cynosbati, L. Wild Gooseberry. Common in rocky woods.
R. oxycanthoides, L. (*R. hirtellum*, Mx.) Union Village, Jessup. Common in Addison County, Brainerd.
R. lacustre, Poir.
Swamps. Not common. Mt. Ascutney, Jessup.
R. prostratum, L'Her. Fetid Currant. Cliffs and mountains. Not rare.
R. floridum, L. Black Currant. Woods. Not common.
R. rubrum, L. Red Currant. Swampy and rocky places.
R. aureum, Pur. Missouri Currant. Escaped from gardens.

CRASSULACEÆ.

114. Penthorum, Gronov. Stone Crop.

P. sedoides, L. Common along ditches.

115. Sedum, Tourn. Live-for-ever.

S. acre, L.
Norwich, on rocks, Jessup. Peacham, Blanchard.
S. Telephium, L. Common.

DROSERACEÆ,

116. Drosera, L. Sundew.

D. rotundifolia, L. Common in damp places.
D. intermedia, D.& H. var. Americana, DC. (*D. longifola. L.*)
Swamps. Not common.

HAMAMELACEÆ.

117. Hamamelis, L. Witch Hazel.

H. Virginica, L. Common.

HALORAGEÆ.

118. Myriophyllum, Vaill. Millfoil.

M. spicatum, L. Ponds and streams.
M. heterophyllum, Mx.
M. tenellum, Bigelow.
Grand Isle, Pringle. Peacham, Blanchard.
M. alterniflorum, D. C.
This may be included here as it was found in Sargent's Bay, Lake Memphremagog, by J. R. Churchill. "Hitherto reported no nearer than Greenland." See Mr. Morong's note, Bullet. Tor. Bot. Club, XIV, 51.

119. Proserpinaca, L.

P. palustris, L. Ditches and wet places.

120. Hippuris, L.

H. vulgaris, L.
Shore of Long Pond, West Danville, Blanchard.

MELASTOMACEÆ.

121. Rhexia. Deer Grass.

R. Virginica, L. Brattleboro, C. C. Frost.

LYTHRACEÆ.

122. Lythrum, L.

L. alatum, Pursh. Charlotte, Pringle.
L. salicaria, L. Killington Peak, near Rutland, L. Bigelow.

123. Nesea, Com.

N. verticillata, H. B. K.
Borders of Ponds near Burlington. Bristol Pond, Pringle. Lake Dunmore and North Hero, Brainerd.

ONAGRACEÆ.

124. Epilobium, L. Willow Herb.

E. augustifolium. Common in clearings. Occurs in Sunderland Hollow, Colchester, with white flowers.
E. palustre, var. lineare, Gray. Swamps.
E. molle, Torr.
Intervale land near Burlington; Peacham, Blanchard.
E. coloratum, Muhl. Wet places. Common.

125. Ludwigia, L.

L. Palustris, Ell. Swamps and bogs.

126. Œnothera, L. Evening Primrose.

Œ. biennis, L. Common. Roadsides and fields.
Œ. pumila, L. Common in Eastern Vermont.
Œ. fruticosa. This is reported by Frost as found at Willoughby; probably a mistake.

127. Circæa, Tourn.

C. Lutetiana, L. Shaded places. Common.
C. alpina, L. Woods and rocks. Common.

CUCURBITACEÆ.

128. Sicyos, L.

S. angulatus, L.
River banks Not common. Middlebury, Brainerd.

129. Echinocystis, T. & G. Wild Cucumber.

E. lobata, T. & G. Banks of streams. Not uncommon.

FICOIDEÆ.

130. Mollugo, L. Carpet weed.

M. verticillata, L. Sandy soil. Common.

UMBELLIFERÆ.

131. Hydrocotyle, Tourn.

H. Americana, L. Penny-wort. Not common. Wet places.

132. Sanicula, Tourn. Snake Root.

S. Canadensis, L. Rather common. Woods.
S. Marilandica, L. Common.

133. Conium, L. Poison Hemlock.

C. maculatum, L. Not common.

134. Cicuta, L. Water Hemlock.

C. maculata, L. Meadows. Not common.
C. bulbifera, L. Swamps. Not common.

135. Sium, L. Water Parsnip.

S. **cicutæfolium**, Gm. (*S. lineare*, Mx.)
Ditches and brooks. Not very common.

136. Pimpinella, L.

P. **integerrima**, B. and H. (*Ziza integerrima*, DC.)
Borders of groves. Common.

137. Cryptotænia, DC.

C. **Canadense**, DC. Woods. Not common.

138. Osmorhiza, Raf. Sweet Cicely.

O. **longistylis**, DC. Rich woods. Common.
O. **brevistylis**, DC. Copses. Common.

139. Thaspium, Nutt. Meadow Parsnip.

T. **aureum**, Nutt. Common in damp fields.
T. **aureum**, var. **apterum**. Gray. Not very common.
T. **trifoliatum**, Gray. Rocky, shaded places. Not common.
T. **trifoliatum**, var. **apterum**. Gray.

140. Selinum.

S. **Canadense**, Mx. (*Conioselinum canadense*, T. and G.)
Swamps. Not common.

141. Archangelica, Hoffm.

A. **atropurpurea**, Hoffm. Meadows. Common in the south part of Vermont. Middlebury, Brainerd; Peacham, Blanchard.

142. Peucedanum, L.

P. sativa, L. (*Pastinaca sativa*, *L.*) Wild parsnip. Common in old fields.

143. Heracleum, L. Cow Parsnip.

H. **lanatum**, Mx Low grounds. Not common. Ripton and Middlebury, Brainerd.

144. Daucus, Tourn. Carrot.

D. Carota, L. Roadsides and fields. In some places a very troublesome weed.

ARALIACEÆ.

145. Aralia, Tourn. Spikenard.

A. **racemosa**, L. Spikenard. Woods. Common.
A. **hispida**, Mx. Sarsaparilla. Common.
A. **nudicaulis**, Sarsaparilla. Common.
A. **quinquefolia**, Gray. Ginseng. Not as common as the preceding.
A. **trifolia**, Gray. Common in damp woods.

CORNACÆ.

146. Cornus, Tourn. Dogwood.

C. **Canadensis**, L. Bunchberry. Very common in damp, shaded ground.
C. **florida**, L. Flowering Dogwood. Found only in the southern part of the State. Not common.
C. **circinata**, L'Her. Thickets and borders of woods.
C. **sericea**, L. Silky Dogwood. Low ground.
C. **stolonifera**, Mx. Red Osier Dogwood. Common along streams and swampy places.
C. **paniculata**, L. Her. Rocky Woods. Common.
C. **alternifolia**, L. Woods and hillsides.

Nyssa, L. Pepperidge. Sour Gum.

N. **multiflora**, Wang. Not common.

CAPRIFOLIACEÆ.

147. Sambucus, Tour.

S. **racemosa**, L. (*S. pubens*, *Mx.*) Red-berried Elder. Rocky slopes. Common.
S. **Canadensis**, L. Common Elder. Abundant in moist soil.

148. Viburnum. Sheepberry.

V. **lantanoides**, Mx. Hobble-bush. Damp, shaded places, not very common.
V. **Opulus**, L. Cranberry-tree. Edges of woods.
V. **pauciflorum**, Py. Mount Mansfield, Pringle.
V. **acerifolium**, L. Rocky woods. Not common.
V. **pubescens**, Pursh. Rocky banks.
V. **dentatum**, L. Arrow-wood. Wet places. Common.
V. **nudum**, L. Damp thickets.
V. **Lentago**, L. Damp thickets.

149. Triosteum, L.

T. **perfoliatum**, L. Feverwort. Middlebury, Brainerd. Southern part of state.

150. Linnæa, Gron.

L. **borealis**, Gron. Shaded hillsides and groves. Not very common generally, but in some localities very abundant.

151. Symphoricarpus. Snowberry.

S. **racemosus**, Mx. var. **pauciflorus**, Robbins. Rocky shores and islands of Lake Champlain, also Peacham, Blanchard.

152. Lonicera, L. Honeysuckle.

L. **oblongifolia**, Hook. Swamp Honeysuckle. Bristol and New Haven, Brainerd.
L. **ciliata**, Muhl. Ledges. Not very common.

L. TARTARICA, L. Tartarian Honeysuckle.
Established in old fields, where it has escaped from cultivation.
L. **hirsuta**, Eat. Rocky woods. Not common.
L. **glauca**, Hill. (*L. parviflora*, Lam.)
Mountain woods and swamps.

153. DIERVILLA, Tourn.

D. **trifida**, Moen. Banks and woods. Common.

RUBIACEÆ.

154. HOUSTONIA, L. Forget-me-not. Bluets.

H. **cærulea**, L. Very abundant in fields and meadows.
H. **purpurea**, L. var. **longifolia**. Gray. Not common.

155. CEPHALANTHUS. Button Brush.

C. **occidentalis**, L. Bogs and wet places. Common.

156. MITCHELLA, L.

M. **repens**, L.
Partridge berry. Woods and shaded banks. Very common.

157. GALIUM, L.

G. VERUM, L. Charlotte, Hosford.
G. **Aparine**, L. Cleavers. Moist ground. Common.
G. **pilosum**, Ait. Fields. Rare.
G. **Kamtschaticum**, St. (*G. circæzans, var. montanum, Gr*)
Slopes of higher mountains.
G. **circæzans**, Mx. Woods.
G. **lanceolatum**, Torr. Woods and clearings. Not common.
G. **trifidum**, L. Common.
G. **asprellum**, Mx. Thickets. Common.
G. **triflorum**, Mx. Borders of woods.

VALERIANACEÆ.

158. VALERIANA, S. Valerian.

V. **sylvatica**, Banks. Swamps. Fairhaven and Craftsbury, Robbins.

DIPSACEÆ.

159. DIPSACUS, L.

D. SYLVESTRIS, Huds. Teasel. Old fields. Not common.

COMPOSITÆ.

160. EUPATORIUM, Tourn.

E. **purpureum**, L. Common. Also several varieties.
E. **perfoliatum**, L. Boneset. Common.
E. **ageratoides**, L. Shady banks. Not rare.

161. Solidago, L. Golden Rod.

S. squarrosa, Muhl. Dry soil. Common throughout the State.
S. cæsia, L. Woods. Common.
S. latifolia, L. Moist, shady places.
S. bicolor, L. Woods.
S. bicolor, L. var. concolor. H. G. Headlands of Lake Champlain. Peacham, Blanchard.
S. macrophylla, Pursh. (*S. thyrsoidea, M.*) Mansfield, Willoughby and other mountains, also Peacham and Barnet.
S. Virga-aurea, L. var. alpina, Bigel. Higher Mountains.
S. humilis, Pur. (*S. Virga-aurea, L. var. humilis, Gr.*) River banks and headlands of Lake Champlain.
S. stricta, Ait. Burlington, Sharon, Norwich.
S. puberula, Nutt. Woods in Western Vermont.
S. odora, Ait. Woods.
S. patula. Muhl. Not generally common.
S. rugosa, Mill, (*S. altissima*, L.) Low ground and fields. Common.
S. neglecta, H. G. Damp woods.
S. arguta, Ait. (*S. Muhlenbergii*, H. G.) Middlebury, Brainerd; Brattleboro, Frost; Smuggler's Notch, Pringle.
S. juncea, Ait. (*S. arguta, var. juncea.* Gray) Burlington.
S. serotina, Ait. Meadows and thickets. Burlington.
S. serotina, Ait. var, gigantea, Gray. (*S. gigantea*, Ait.) Edge of woods.
S. Canadensis, L. Along fences and edges of woods.
S. nemoralis, Ait. Hills and pastures. Common.
S. rigida, L. Dry fields and woods.
S. lanceolata. Meadows throughout the State.

162. Sericocarpus, Nees.

S. conyzoides, Nees. Dry woods. Rare.
S. solidagineus, Nees. More moist ground than the first. Not common.

163. Aster. L.

A. corymbosus, Ait Woods. Not rare.
A. macrophyllus, L. Woods, in damp soil.
A. radula, Ait, Brattleboro, Frost.
A. Novæ, Angliæ, L. Damp soil. Not rare.
A. patens, Ais. Very rare. Barrows.
A. undulatus, L. Dry woods.
A. cordifolius, L. Woods.
A. sagittifolius, Willd. Brattleboro. Frass.
A. laevis, L. Open woods in rather dry soil.
A. ericoides, L. var. Pringlei. Gray. Shores and islands of Lake Champlain, Pringle, Brainerd.
A. amethystinus, Nutt. Brattleboro, Frost.
A. multiflorus, Ais. Pastures and hillsides.
A. dumosus, L. Edges of woods.
A. vimineus Rocky banks of Winooski river. Pringle.

A. diffusus, Ait. (*A. miser, L. in part.*)
A. diffusus, Ait. var. hirsuticaulis, Gray. Woods.
A. Tradescanti, L. (*A. miser. Ait.*)
A. paniculatus, Lam. (*A. carneus, Nees and A. simplex, Willd.*) Low ground.
A. salicifolius, Ait. (*A. Carneus, Nees in part.*)
A. junceus, Ait. (*A. æstivus*, Gray's Manual mainly.) Sphagnous bogs.
A. Novi-Belgii, L. (Includes *A. longifolius* of Gray's Manual.)
A. puniceus, L. Meadows and thickets.
A. umbellatus, Mill. (*Diplopappus umbellatus*, T. & G.) Damp, thickets and meadows.
A. linariifolius, L. (*Diplopappus linariifolius*, H.) Sandy soil.
A. ptarmicoides, T & G. Rocky hillsides rare.
A. acuminatus, Mx. Woods common.

164. Erigeron, L. Fleabane.

E. hyssopifolius, Mx. (*Aster graminifolius, Pur.*) Rare. Quechee Gulf, Jessup; Mt. Mansfield, Pringle. Willoughby Lake, and a few other localities.
E. bellidifolius, Muhl. Borders of groves.
E. Philadelphicus, L. Banks of streams. Common.
E. annuus, Pers. Meadows.
E. strigosus, Muhl. Fields.
E. Canadensis, L. Old fields. Common.

165. Antennaria, Gærtn. Everlasting.

A. plantaginifolia, Hook. Common.

167. Anaphalis, DC.

A. maragaritacea, B. & H. (*Antennaria margaritacea, Gaert.*) Pearly Everlasting. Quite common.

168. Gnaphalium, L. Everlasting.

G. polycephalum, Mx. Common.
G. decurrens, Ives. Dry fields. Common.
G. uliginosum, L. Low grounds.

169. Inula, L. Elecampane.

I. Helenium, L. Roadsides. Common.

170. Ambrosia, Tourn. Rag Weed.

A. trifida, L. Common in damp places.
A. artemisiæfolia, L. Old fields and gardens. Common.

171. Xanthium, Tourn. Cockle Bur.

X. strumarium, L. Not very common.

172. Rudbeckia, L. Cone Flower.

R. hirta Introduced from the west. Common.

R. laciniata L. Meadows. Common.

173. Helianthus, L. Sunflower.

H. giganteus, L. Brattleboro, Frost.
H. divaricatus, L. Pine woods.
H. strumosus, L. Burlington, F. H. Hosford.
H. tracheliifolius, Willd. Brattleboro, Frost.
H. decapetalus, L. Meadows near Burlington, Norwich, Barnet, Blanchard.
H. tuberosus, L. Artichoke. About old gardens.

174. Bidens, L. Beggar Ticks.

B. frondosa, L. Damp soil. Common.
B. connata, Willd. Wet ground.
B. cernua, L. Common. Wet ground.
B. chrysanthemoides, Mx. Wet ground.
B. Beckii, Torr. Borders of ponds. Little Otter Creek. Brainerd.

175. Anthemis,

A. Cotula, D. C. (*Maruta Cotula, D. C.*) May-weed. Common.

176. Achillæa, Yarrow.

A. Millefolium, L. Dry fields. Sometimes with pink heads.

177. Chrysanthemum, Tour.

C. Leucanthemum. L. (*Leucanthemum vulgare, L.*) Ox-eye Daisy, White weed. Very abundant and troublesome.

178. Tanacetum. Tansy.

T. vulgare, L. Common about old gardens and dwellings.

179. Artemisia, L. Wormwood.

A. Canadensis, Mx. Willoughby Lake, Smugglers Notch, Mt. Mansfield, Pringle, Perkins, Bates. Shores of Lake Champlain, Brainerd.
A. Absinthium, L. Common in many places.
A. vulgaris, L. Common.

180. Tussilago, Tourn.

T. Farfara, L. Coltsfoot. Borders of streams.

181. Petasites, Tourn. (Nardosmia.)

P. palmata, Gray. Swamp. Not common.

182. Senecio, L.

S. aureus, L. Bogs. Not uncommon.
S. aureus, L. var. obovatus, T. & G.
S. aureus, L. var. Balsamitæ, T. & G. Barnet.
S. vulgaris, L. Middlebury, Brainerd

183. Erechthites, Raf. Fireweed.

E. **hieracifolius**, Raf. Common in clearings.

184. Arctium,

A. Sappa, L. (*Lappa Officinalis, All.*) Burdock. Common.

185. Cnicus, Tourn. (Cirsium of Manual.)

C. **Arvensis**, Hoff. Canada Thistle. Far too abundant.
C. **lanceolatus**, Willd. Common Field Thistle.
C. **horridulus**, Pursh, Brattleboro, Frost.
C. **pumilus**, Torrw. Fields, Wallingford, Brainerd and elswhere.
C. **muticus**, Pursh. Damp soil.
C. **altissimus**, Willd, var. n. f. discolor, Gray (*C. discolor*, manul) Fields and Woods.

186. Onopordon, Vaill. Cotton Thistle.

O. acanthium, L. Dry fields and roadsides.

187. cichorium, Tourn. Chiccory.

C. intybus, Grass land and waysides. In some places a troublesome weed.

188. Krigia, Sch.

K. **Virginica**, Willd. Dry fields, West Windsor, Blanchard.

189. Tragopogon.

T. porrifolius, L. Salsify, Middlebury, Brainerd.

190. Leontodon.

L. autumnalis, Fall dandelion.

191. Hieracium, Tourn. Hawkweed.

H. aurantiacum, L. Burlington, Perkins; Middlebury and Bridport, Brainerd.
H. **Canadense**, Mx. Borders of Woods.
H. **paniculatum**, L. Woods. Common.
H. **venosum**, L. Pine plains and clearings.
H. **scabrum**, Mx. Open woods.
H. **Gronovii**, L. Dry Ground.

192. Prenanthes, Vaill. (Nabalus.)

P. **alba**, Hook. Edges of woods.
P. **altissima**, Hook. Damp woods.
P. **Bootii**, DC. Mt. Mansfield, Pringle.

193. Taraxacum, Hall. Dandelion.

T. **officinale**, W. (*T. Dens-leonis, Desf.*) Very common.

194. Lactuca, Tourn. Lettus.

L. scariola, L. Shoreham, Brainerd.

L. Canadensis, L. Borders of fields.
L. hirsuirta, L. Muhl. (*L. Canadense, var. sanguinea, T. & G.*)
L. leucophæa, Gray. (*Mulgedium leucophæum, DC.*) Windsor, Peacham, Blanchard. Common.

195. Sonchus, L. Thistle.

S. oleraceus, L. Cultivated grounds.
S. asper, Vill. Waste grounds.
S. arvensis, L. Roadsides and fields, Butler's Island, Lake Champlain, Brainerd.

LOBELIACEÆ.

196. Lobelia, L. Lobelia.

L. cardinalis, L. Cardinal-flower. Not generally common, but abundant in limited localities.
L. Dortmanna, L. Willoughby Lake, Wood; Shelburn Pond, Perkins; Fairlee Pond, Brainerd.
L. spicata, Law. Fields and pastures.
L. Kalmii, L. Damp places. In some places very common.
L. inflata, L. Indian Tobacco. Common in dry fields.

CAMPANULACEÆ.

197. Specularia, H.

S. perfoliata, A. DC. Dry rocky ground. Not common.

198. campanula, Tourn, Hare-bell.

C. rapunculoides, L. Brandor, Knowlton, Peacham, Blanchard.
C. rotundifolia, L. Common Hare-bell, Very abundant. At McNeil's Point, Charlotte, with white flowers.
C. aparinoides, Pursh. Damp soil. Not very common.

ERICACEÆ.

199. Gaylussacia, H. B. K. Huckelberry.

G. resinosa, H. G. Borders of swamps and woodland.

Vaccinium.

V. virgatum, Ait.var. tenellum, Gray. (*V. tenellum Ait.*)
V. Pennsylvanicum, Law. Low Blueberry. Dry soil. Not common.
V. Pennsylvanicum, var. angustifolium. Gray.
V. Canadense, Kalm. Blueberry. Swamps and damp woods.
V. vacillans, Sol. Low Blueberry. Pine barrens, etc. Common.
V. corymbosum, L. High-bush Blueberry. Swamps.
V. uliginosum, L. Mountain Blueberry. Summits of Green Mountains.

V. caespitosum, Mx. Mt. Mansfield, Pringle.
V. Vitis-Idæa, L. Mountain Cranberry. Mountain Summits.
V. macrocarpon, Ait. Large Cranberry. Bogs.

200. Oxycoccus, Tour.

O. palustris, Pers. (*Vaccinium oxycoccus.* L) Mountain Cranberry. Boggy places on Mountains.

201. Chiogenes, Salisb.

C. hispidula, T. & G. Creeping Snowberry. Common in cold woods along the Green Mountains.

202. Arctostaphylos, Adans.

A. Uva-ursi, Spr. Bearberry. Burlington, Perkins. Barnet, Blanchard.

203. Epigæa, L. Mayflower. Arbutus.

E. repens, L. Very common.

204. Gaultheria, Kalm. Wintergreen. Checkerberries.

G. procumbens, L. Common in woods and swamps.

205. Leucothoe, Don.

L. racemosa, Gray. Swamps. Not common.

206. Andromeda, L.

A. polifolia, L. Swamps. Common.
A. ligustrina, Muhl. Southern portions of the state.

207. Cassandra, Don. Leather-leaf.

C. calyculata, Don. Ditches and swamps. Not common.

208. Kalmia, L. Laurel.

K. latifolia, Mountain Laurel, L. Found only in the Southern counties.
K. angustifolia, Sheep Laurel, L. Dry soil. Abundant.
K. glauca, Ait. Swamp Laurel. Swamps. Common.

209. Rhododendron, L.

R. nudiflorum, Torr. (*Azalea nudiflorum, L.*) Purple Azalea. Swamps. Not common.
R. Rhodora, Don. (*Rhodora Canadensis, L.*) Swamp on Porter's Point, Colchester. Higbee's swamp, Burlington, Perkins; Derby, Richmond, Horsford.
R. maximum, L. Great Laurel. Borders of Groton Pond, Perkins; Peacham, Blanchard.

210. Ledum, L. Labrador Tea.

L. latifolium, Ait. Swamps and mountains. Common.

211. Chimaphila, Pursh.

C. umbellata, Nutt. Princes Pine. Dry woods. Common.
C. maculata, Pursh. Pine woods.

212. Moneses, Salis.

M. uniflora, Gray. Pyrola. Not common.

213. Pyrola, Tourn.

P. minor, L. Smuggler's Notch, Pringle.
P. secunda, L. Wintergreen, Pyrola. Pine woods. Common.
P. chlorantha, Swartz. Pine Woods.
P. elliptica, Nutt. Woods. Common.
P. rotundifolia, L. Damp woods. Common.
P. rotundifolia, L. var. incarnata, DC. Swamps, Peacham, Blanchard.

214. Pterospora, Nutt.

P. Andromedea, Nutt. Dry pine woods. Not common.

215. Monotropa, L.

M. uniflora, L. Indian Pipe. Not generally very common. Dark woods, especially on mountain sides.
M. Hypopitys, L. Pine-sap. Woods. Not common.

DIAPENSACEÆ.

216. Diapensia, L.

D. Lapponica, L. Mt. Mansfield, Pringle.

PRIMULACEÆ.

217. Primula, Linn.

P. Mistassinica, Mx. Shore of Willoughby Lake. Wood, Pringle.

218. Trientalis, Linn.

T. Americana, Pursh. Starflower. Common.

219. Steironema, Raf. Loostrife

S. ciliatum, Raf. (*Lysimachia ciliata, L.*) Borders of woods.
S. lanceolatum, Gr. var. hybridum, Gray. (*Lysimachia lanceolata*, Walt. var. *hybrida*, Gray.) Wet soil. Common.

220. Lysimachia, Tourn. Loosestrife.

L. quadrifolia, L. Woods. Common.
L. stricta, Ait. Damp soil.
L. thyrsiflora, L. Swamps. Common.
L. nummularia, L. Money-wort. Escaped from gardens. Peacham, Blanchard.

221. Samolus, L.

S. Valerandi, L. Var. Americanus, Gray. Water Pimpernel. River banks. Not common.

OLEACEÆ.

222. Ligustrum, Tourn. Privet.

L. vulgare, L. Naturalized from cultivation.

223. Fraxinus, Tourn. Ash.

F. Americana, L. White Ash. Moist woods. Common.
F. pubescens, Lam. Red Ash. Along the banks of streams.
F. sambucifolia, Lam. Black Ash. Swamps. Common.
F. viridis, Mx. Green Ash. Prof. Jessup has found this in a swamp at Phillipsburg "just over the line from Highgate."

APOCYNACEÆ.

224. Apocynum, Tourn.

A. androsæmifolium, L. Common.
A. cannabinum, L. Not very common.

ASCLEPIADACEÆ.

225. Asclepias, L. Milkweed.

A. tuberosa, L. Sandy fields. Not usually common.
A. purpurascens, L. Common.
A. incarnata, L. Wet places. Common.
A. Cornuti, Dec. Fields and roadsides. Common.
A. obtusifolia, Mx. Dry soil.
A. phytolaccoides, Pursh.
A. variegata, L. Dry soil. Brattleboro, Frost.
A. quadrifolia, L. Rocky woods. Common.
A. verticillata, L. Not Common.

226. Vincetoxicum, Moench.

V. Nigrum, Moen. Meadows. Not common.

GENTIANACEÆ.

227. Gentiana, L.

G. crinita, Frœl. Fringed Gentian. Damp Meadows. Not common.
G. amarella, L. var. acuta, Hook. Smugglers Notch. Mt. Mansfield.
G. quinqueflora, Law. Wood. New Haven, Brainerd.
G. Andrewsii, Gris.
G. linearis, Frœl. Cedar Swamps. Pringle. Wet meadows and borders of ponds throughout the Green Mountains. Brainerd.

228. Halenia, Bork.

H. deflexa, Gris. Banks of Lewis Creek, Charlotte, Hosford.

229. Bartonia, Muhl.

B. tenella, Muhl. Swampy places.

230. Menyanthes, Tourn. Buckbean.

M. trifoliata, L. Common in swamps.

POLEMONIACEÆ.

231. Polemonium, Tourn.

P. cæruleum, L. Ripton, Vermont, E. Brainerd.

HYDROPHYLLACEÆ.

232. Hydrophyllum, Tourn. Water-leaf.

H. Virginicum, L. Woods.
H. Canadense, L. Common in damp woods.

BORRAGINACEÆ.

233. Cynoglossum, Tourn. Hounds-tongue.

C. officinale, L. Roadsides. Common.
C. Virginicum, L. Woods. Common.

234. Echinospermum, Sw. Beggar ticks.

E. Lappula, Lehm. Tick-seed. Dry Soil. Common.
E. Virginicum, Leh. (*Cynoglossum Morisoni, DC.*) Thickets. Not common.

235. Myosotis, L. Forget-me-not.

M. palustris, With. Wet grounds. Very common in some places, as Brandon and Westminster, rare elsewhere.
M. laxa, Lehm. Abundant, Peacham, Blanchard.
M. arvensis, Hoff. Sharon, Dr. Baxter. Scarce.
M. verna, Nutt. Brattleboro, Frost. Windsor, Leland.

236. Lithospermum, Tourn.

L. arvense, L. Old fields. Not common.
L. officinale, L. Dry fields.

237. Symphytum, Tourn.

S. officinale, L. Comfrey. Damp soil. Not common.

238. Lycopsis, L.

L. arvensis, L. Roadsides. Not common.

239. Echium, Tourn.

E. vulgare, L. Pomfret and Sharon, Jessup. Scarce.

CONVOLVULACEÆ.

240. Convolvuvus, Linn.

C. spithamæus, L. (*Calystegia spithæma*, Pursh.) Bindweed. Thickets.
C. sepium, L. (*Calystegia sepium. R. Br.*) Wild Morning Glory. River banks and damp thickets. Common.
C. Arvensis, L. Bindweed. Common about Burlington.

241. Cuscuta, Tourn.

C. Gronovii, Willd. Dodder. Damp ground. Not common.

SOLANACEÆ.

242. Solanum, Tourn.

S. nigrum, L. Nightshade. Fields and cultivated grounds.
S. Dulcamara, L. Bittersweet. Roadsides. Not common.

243. Physalis, L.

P. grandiflora, Hook. This species grows on Providence Island in considerable abundance.
P. pubescens, L. "A weed in gardens." Peacham, Blanchard.
P. Virginiana, Mill, (*P. viscosa, S.*). Ground Cherry. Not common.

244. Nicandra, Adans.

N. physaloides, Gært. Apple of Peru. Thetford and Peacham, Blanchard; Shoreham, Brainerd.

245. Datura, L. Thornapple.

D. Stramonium, L. Waste places.

246. Hyoscyamus, Tourn.

H. niger, L. Dry soil. Not common.

SCROPHULARIACEÆ.

247. Verbascum, L. Mullein.

V. Thapsus, L. Common in old fields.
V. Blattaria, L. Not common.

248. Linaria, Tourn.

L. Canadensis, Spreng. Moist ground.
L. vulgaris, Moen. Butter and-eggs. Common.

249. Scrophularia, Tourn.

S. nodosa, L. Not common.

250. Chelone, Tourn.

C. glabra, L. Damp places. Common.

251. Pentstemon, Mitchell.

P. pubescens, Soland. Rocky ground. Not common.

252. Mimulus, L. Monkey Flower.

M. ringens, L. Wet places. Common.

253. Gratiola, L.

G. Virginiana, L. Middlebury, Brainerd.
G. aurea, Muhl. Wet places. Not common.

254. Ilysanthes, Raf.

I. gratioloides, Benth. Southern Vermont; also Barnet, Blanchard.

255. Veronica, L. Speedwell.

V. Virginica, L. Moist banks. Common.
V. Anagallis, L. Brooks and ditches.
V. Americana, Sch. Wet ground. Not common.
V. scutellata, L. Brooks.
V. officinalis, L. Drier soil than the preceding. Wallingford.
V. serpyllifolia, L. Meadows.
V. peregrina, L. Cultivated ground. Common.
V. arvensis, L. Old fields. Not rare.
V Buxbaumii, Ten. Weed in grass ground in Eastern Vermont. Jessup.

256. Gerardia, L. Foxglove.

G. pedicularia, L. Dry woods. Not common.
G. flava, L. Woods. Southern Vermont.
G. quercifolia, Pursh Woods. Not common.
G. purpurea, L. Wet places. Not common.
G. purpurea, L. var. paupercula, Gray. Knight's Island, Lake Champlain, Brainerd.
G. tenuifolia, Vahl. Dry fields. Southern Vermont.

257. Castilleia, Mutis. Painted Cup.

C. pallida, Kun. var. septentrionalis. North side of Mt. Mansfield near the top, Pringle. Sterling Mountain, Perkins.

258. Pedicularis, Tourn.

P. Canadensis, Lousewort. Common in open woods.

259. Melampyrum, Tourn.

M. Americanum, Mx. Cow-wheat. Woods. Common.

OROBANCHACEÆ.

260. Aphyllon, Mitch.

A. uniflorum, Gray. Old woods. Rather rare.

261. Conopholis, Wall.

C. Americana, Wall. Oak woods. Not common.

262. Epiphegus, Nutt.

E. Virginiana, Bart. Beech Drops. Beech woods. Not common.

LENTIBULACEÆ.

263. Utricularia, L. Bladderwort.

U. inflata, Wait. Chiefly in Southern Vermont.
U. vulgaris, L. Swamps and ditches.
U. intermedia, Hay. Onion river pond, Peacham, Blanchard, Me.
U. purpurea, Wall. East Barnet, West Danville, Blanchard.
U. cornuta, Mx. Shallow water.

264. Pinguicula, L.

P. vulgaris, L. East side of Mt. Mansfield, Pringle; Sterling Mountain, Perkins.

ACANTHACEÆ.

265. Dianthera, Linn.

D. Americana, L. Borders of streams. Not common.

VERBENACEÆ.

266. Phryma, L.

P. Leptostachya, L. Woods. Not very common.

267. Verbena. L.

V. urticæfolia, L. White Vervain. Roadsides. Common.
V. hastata, L. Blue Vervain. Roadsides. Common.

LABIATÆ.

268. Trichostema, L.

T. dichotomum, L. Brattleboro, Frost. West Windsor, Blanchard.

269. Isanthus, Mx.

I. cæruleus, Mx. Middlebury, Brainerd.

270. Teucrium, L.

T. Canadense, L. Germander. Damp. Rocky soil.

271. Mentha, Tourn.

M. viridis, L. Spearmint. Brooks and wet places.
M. piperita, L. Peppermint. Wet places.

M. Canadensis, L. Mint. Common.
M. Canadensis, var. glabrata. Benth. Not common.

272. Lycopus, Tourn.

L. Virginicus, L. Low ground. Common.
L. sinuatus, Ell. (*L. Europæus, var. sinuatus*, Gray.)
L. Europæus, L. Not very common.

273. Hyssopus, L.

H. officinalis, L. Hyssop. Grand Isle. Pringle.

274. Pycnanthemum, Mx.

P. aristatum, Mx. Southern Vermont.
P. linifolium, Pursh. Southern Vermont.
P. lanceolatum, Pursh. Open fields.
P. incanum, Mx. Rocks and shaded places.

275. Calamintha, Mœn.

C. clinopodium, Benth. Rock soil.

276. Melissa, P. Balm.

C. officinalis, L. Escaped from gardens.

277. Hedeoma, Pers. Pennyroyal.

H. pulegioides, Pers. Dry fields. Common.

278. Monarda, L. Bergamot.

M. didyma, L. Scarlet Balm. Barnet, Blanchard; Warren, Brainerd.
M. fistulosa, L. var. mollis. Bent. Dry woods.

279. Blephilia, Raf.

B. hirsuta, Benth. Damp woods.

280. Lophanthus, Giant Hyssop.

L. nepetoides, Benth. Thickets.
L. scrophulariæfolius. Benth.

281. Nepeta, L.

N. Cataria, L. Catnip. Common about gardens and pastures.
N. Glechoma, Benth. Ground Ivy. Roadsides.

282. Scutellaria, L. Skullcap.

S. lateriflora, L. Damp places.
S. parvula, Mx. Rocks. Not Common.
S. galericulata, L. Damp soil. Not common.

283. Brunella, Tourn.

B. vulgaris, L. Fields and open woods.

284. PHYSOSTEGIA, Benth.

P. **Virginiana**, Benth. Shore of Lake Champlain, Pringle.

285. MARRUBIUM, Tourn. Horehound.

M. VULGARE, L. Not uncommon.

286. LEONURUS, L. Motherwort.

L. CARDIACA, L. Borders of fields and gardens.

287. GALEOPSIS, L. Hemp Nettle.

G. TETRAHIT, L. Roadsides. Common.
G. LADANUM, L. Old fields.

288. STACHYS, L. Hedge Nettle.

S. **palustris**, L. Not common.
S. **aspera**, MX. (*S. palustris, L. var. aspera* Gray.) Found chiefly in the northern part of the State.

PLANTAGINACEÆ.

289. PLANTAGO, L. Plantain.

P. MAJOR, L. A common weed.
P. **Rugellii, Decais.** (*P. Kamtschatica Hook.*) Dry soil. Common. Often confounded with the first.
P. LANCEOLATA, L. Common.
P. **Virginica**, L. Found only in southern part of the State.

290. LITTORELLA, L.

L. **juncea**, Berg. (*L. lacustris, L.*) Shore of Lake Champlain at Alburgh. Pringle.

AMARANTACEÆ.

291. AMARANTUS, Tourn.

A. RETROFLEXUS, L. A garden weed. Common.
A. CHLOROSTACHYS, Willd.
A. ALBUS, L. Not common. Pringle.

292. ACNIDA, L.

A. **tuberculata**, Maq. (*Montelia tamarascina*, Gray.) Water-Hemp. Low grounds. Not common.

CHENOPODIACEÆ.

293. CHENOPODIUM, L.

C. ALBUM, L. Pigweed. Very common.
C. URBICUM, L. Middlebury, Brainerd.
C. HYBRIDUM, L. Common.

C. BOTRYS, L. Jerusalem Oak. Common on sandy shores of Lake Champlain.

294. BLITUM, Tourn.

B. capitatum, L. Roadsides and fields.

295. ATRIPLEX, Tourn.

A. patula, var. littoralis, Gray. Ferrisburgh, Pringle.

PHYTOLACCACEÆ.

296. PHYTOLACCA, Tourn. Pokeweed.

P. decandra, L. Not common in most places.

POLYGONACEÆ.

297. RUMEX; L. Dock.

R. Patientia, L. Common in the extreme northern part of the State.
R. Aquatica, L. Near the summit of Mt. Mansfield by the road down the east side.
R. Britannica, L. (*R. orbiculatus.* Gray.) Water Dock. Pringle. Waste places.
R. verticillatus. L. Swamp-Dock. Bogs and wet places. Common.
R. crispus, Yellow-Dock. Cultivated ground. Common.
R. obtusifolius, L. Bitter Dock. Cultivated ground.
R. sanguineus, L. Red-veined Dock. Found chiefly in southern part of the State.
R. ACETOSELLA, L. Sheep Sorrel. Very common, especially in worn out soil.
R. ACETOSA L. Charlotte.

298. POLYGONUM, L. Knot weed. Smartweed.

P. viviparum, L. Mt. Mansfield, Pringle.
P. Careyi, Oln. Swamps.
P. ORIENTALE, L. Prince's Feather. Escaped from gardens. Doubtfully persistent.
P. Pennyslvanicum, L. Wet places. Common.
P. PERSICARIA, L. Damp waste places.
P. Hydropiper, L. Common in damp places.
P. acre. H. B. K. Common in wet places.
P. hydropiperoides, Mx. Less common.
P. amphibium, L. Common in sluggish streams and ponds.
P. Muhlenbergii, Watson. Wet places, Pringle.
P. Hartwrightii. Bogs. Common.
P. Virginianum, L. Dry soil.
P. articulatum, L. Colchester Point, Pringle.
P. aviculare, L. Common about dooryards.
P. erectum, L. (*P. aviculare, var. erectum, Roth.*) Common in dooryards.

P. tenue, Mx. Dry, rocky soil.
P. arifolium, L. Swamps. Common.
P. sagittatum, L. Low grounds. Common.
P. convolvulus, L. Roadsides and field. Common.
P. cilinode, Mx. Woods.
P. dumetorum, L'Her. Moist thickets.

299. Fagopyrum, Tourn. Buckwheat.

P. esculentum, Mœn. Old fields.

ARISTOLOCHIACEÆ.

300. Asarum, Tourn. Wild Ginger.

A. Canadense, L. Common in moist, rocky soil.

LAURACEÆ.

301. Sassafras, Nees. Sassafras.

S. officinale, Nees. Found only in the southern part of the State.

302. Lindera, Th. Spice Bush.

L. Benzoin, Nees. Damp woods and swamps.

THYMELACEÆ.

303. Dirca, L. Moosewood.

D. palustris, L. Swamps near Burlington. Common in Northern Vermont.

ELÆAGNACEÆ.

304. Shepherdia, Nutt.

S. Canadensis, Nutt. Rocks. Shores of Lake Champlain and elsewhere. Rare.

SANTALACEÆ.

305. Comandra, Nutt. Toadflax.

C. umbellata, Nutt. Dry soil. Pine barrens. Common.
C. livida, Rich. Mt. Mansfield. Pringle.

PODOSTEMACEÆ.

306. Podostemon, Mx.

P. ceratophyllus, Mx. Pringle.
P. peplus. Charlotte and Grand Isle. Pringle.

EUPHORBIACEÆ.

307. Euphorbia, L.

E. maculata, L. Roadsides.
E. hypericifolia, L. Sandy fields.
E. platyphylla, L. Roadsides
E. Cyparissias. Peacham, Blanchard.
E. peplus, L. Grand Isle. Pringle; Wallingford, Brainerd.
E. Helioscopia, L. Waste ground.

308. Acalypha, L.

A. Virginica, L. Open fields.

EMPETRACEÆ.

309. Empetrum, Tourn. Crowberry.

E. nigrum, L. Tops of higher mountains.

CERATOPHYLLACEÆ.

310. Ceratophyllum, L.

C. demersum, L. var. echinatum, Gray. Near Burlington, and also at Lake Memphremagog.

CALLITRICHACEÆ.

311. Callitriche, L.

C. verna, L. Borders of ponds.
C. autumnale, L. Borders of ponds.

URTICACEÆ.

312. Ulmus, L. Elm.

U. fulva, Mx. Slippery Elm. Damp woods. Not so common as the next.
U. Americana, L. Common Elm.
U. racemosa, Th. Cork Elm. River banks and damp soil. Not common.

313. Celtis, Tourn. Hackberry.

C. occidentalis, L. Meadows. Not very common. Highgate Brainerd.

314. Morus, Tourn. Mulberry.

M. rubra, L. Red Mulberry. Thickets. Rare.
M. alba. L. White Mulberry. Middlebury. Brainerd.

315. Urtica, Tourn. Nettle.

U. gracilis, Ait. Moist ground. Common.

U. DIOICA, L. Roadsides, etc. Common.
U. URENS. Barnet, Blanchard. Rare.

316. LAPORTEA, Gaud.

L. Canadensis, Gaud. Moist woods. Not common.

317. PILEA, Lind.

P. pumila, Gray. Moist thickets.

318. BŒHMERIA, Jacq.

B. cylindrica. Willd. Swamps.

319. PARIETARIA, Tourn.

P. Pennsylvanica, Muhl. Limestone cliffs. Not common.

320. CANNABIS, Tourn. Hemp.

C. SATIVA, L. Waste places.

321. HUMULUS, L. Hop Vine.

H. lupulus, L. River banks and moist thickets.

PLATANACEÆ.

322. PLATANUS, L. Sycamore. Button-Ball.

P. occidentalis, L. River banks. Not common.

JUGLANDACEÆ.

323. JUGLANS, L.

J. cinerea, L. Butternut. Common throughout the State.

324. CARYA, Nutt. Walnut.

C. alba, Nutt. Shellbark Walnut, Hickory. Most common near Lake Champlain.
C. porcina, Nutt. Pignut. Common along the Connecticut river.
C. amara, Nutt. Bitter Walnut. Not common.

MYRICACEÆ.

325. MYRICA, L.

M. Comptonia, DC. (Comptonia aspelnifolia, Ait.) Sweet Fern. Common.
M. Gale, L. Borders of ponds.

BETULACEÆ.

326. BETULA, Tourn. Birch.

B. lenta, L. Sweet Birch, Black Birch. Common.
B. lutea, Mx. Yellow Birch. Common.

B. alba, var. populifolia Sp. White Birch.
B. papyracea, Ait. Canoe Birch, Paper Birch. Common.

327. Alnus, Tourn.

A. incana, Willis. Alder. Common in damp soil.
A. serrulata, Ait. Alder. Rare.
A. viridis DC. Mountain Alder. Summits of higher mountains.

CUPULIFERÆ.

328. Corylus, Tourn. Hazel.

C. Americana, Walt. Common.
C. rostrata, Art. Common.

329. Ostrya, Michl. Hornbeam.

O. Virginica, Willd. Common.

330. Carpinus, L. Ironwood.

C. Caroliniana, Walt. (*C. Americana Mx.*) Not very abundant.

331. Quercus, L. Oak.

Q. alba, L. White Oak. Common in many parts of the State.
Q. macrocarpa, Mx. Bur Oak. Not common.
Q. bicolor, Willd. Swamp White Oak. Not common.
Q. Prinus, L. Var. monticola, Mx. Chestnut Oak. Not common.
Q. Prinus, L. Var. acuminata, Mx. (*Q. Muhlenbergii.*) Gardener's Island, Lake Champlain. Pringle.
Q. coccinea. Wang. Scarlet Oak. Not common.
Q. tinctoria. Burt. (*Q. coccinea. var. tinctoria.* Gray.) Yellow Oak.
Q. rubra, L. Red Oak. Perhaps the most common species.
Q. ilicifolia, Wang. Black Scrub Oak. Not common.

332. Castanea, Tourn. Chestnut.

C. vesca, L. Chiefly found in Southern Vermont. Not common.

333. Fagus, Tourn. Beech.

F. ferruginea, Ait. Abundant everywhere.

SALICACEÆ.

334. Salix, Tourn.

S. nigra, Mar. Black Willow. Banks of streams.
S. lucida, Muhl. Willow. Swamps.
S. fragilis, L. Osier Willow.
S. alba, L. White Willow.
S. alba, L. Var. vitellina, Koch. Yellow Willow.
S. Babylonica, Tourn. Weeping Willow. Established by cultivation.

S. **longifolia**, Muhl. Lake Champlain, Pringle; Windsor, Jessup.
S. **discolor**, Muhl. Banks of streams and swamps.
S. **rostrata**, Rich. (*S. livida var. occidentalis, Gray.*) Common.
S. **chlorophylla**, And. Mt. Mansfield, Pringle.
S. **myrtelloides**, L. Swamps.
S. **Uva-ursi**, Pursh. (*S. Cutleri, Tuck.*) Summits of higher mountains.
S. **petiolaris**, Sm.
S. **sericea**, Mar. Silky willow. Swamps and sandy banks of streams.
S. **monilis**, Mar. Damp thickets.
S. **cordata**, Muhl. Low grounds.
S. **balsamifera**, Barret. Mt. Mansfield. Pringle.
S. **candida**, Willd. Bogs.
S. PURPUREA, L. Purple willow. Burlington, Herrick; Middlebury, Brainerd.

335. POPULUS.

P. **tremuloides**, Mx. American Aspen. Common.
P. **grandidentata**, Mx. Woods and hillsides. Common.
P. **balsamifera**, Mx, Balsam Poplar. Woods and river banks. Common.
P. BALSAMIFERA, Mx. var. CANDICANS. G. Balm of Gilead.
P. **monilifera**, Ait. Including P. angulata of Gray's Manual. Cottonwood. Western Vermont.
P. DILITATA, Ait. Lombardy Poplar.
P. ALBA, L. Silver Poplar.

MONOCOTYLEDONS.

HYDROCHARIDACÆ.

336. Anacharis, Rich.

A. **Canadensis,** Planc. Not very common.

337. Vallisneria, Mich. Eel Grass.

V. **spiralis,** L. Winooski River, Mississquoi Bay and River and elsewhere. Common.

ORCHIDACEÆ.

338. Microstylis, Nutt.

M. **monophyllus,** Lindl. Rare. Pomfret, Ascutney, etc. Jessup.

M. **ophioglossoides,** Nutt. Brandon, Brainerd; Pomfret and Ascutney, Jessup.

339. Liparis, Rich.

L. **liliifolia,** Rich. Moist banks. Rare. Middlebury, Brainerd, "Banks of Connecticut River at Windsor; Leland."

L. **Lœselii,** Rich. Meadows. Middlebury, Brainerd. Common in wet meadows.

340. Aplectrum, Nutt.

A. **hyemale,** Nutt. Woods. Common.

341. Corallorhiza, Hall. Coral Root.

C. **innata,** R. Br. Damp woods. Rare. Norwich, Jessup; Burlington, Perkins.

C. **odontorhiza,** Nutt. Moist banks. Rare. Barnet, Blanchard; Middlebury, Brainerd.

C. **multiflora,** Nutt. Very rare.

342. Spiranthes, Richards. Ladies Tresses.

S. **latifolia,** Torr. Moist places.

S. **Romanzoffiana,** Ch. Bristol Bog, Pringle; Peacham, Blanchard.

S. **cernua,** Rich. Meadows, along brooks. Common.

S. **gracilis,** Big. Woods. Not very common.

343. Listera, R. Br. Twayblade.

L. **cordata,** R. Br. Bogs. Common.

L. **convallarioides,** Hook. Along mountain brooks, and cedar swamps. Peacham, Blanchard, Ripton, Brainerd.

344. Goodyera, R. Br.

G. repens, R. Br. Borders of wood roads and cedar swamps. Not common.
G. pubescens, R. Br. Woods. Rather common.

345. Arethusa, Gron.

A. bulbosa, L. Swamps. Common.

346. Calopogon, R. Br.

C. pulchellus, R. Br. Swamps. Not rare.

347. Pogonia, Juss.

P. ophioglossoides, Nutt. Swamps and wet places. Common.
P. pendula, Lind. "In a dry wood of beech, birch, etc., on a hill south of Fair Haven Valley, Chandler." Oakes' list in Thomson's Vermont. p. 200.
P. verticillata, Nutt. Near High Bridge, Colchester, Robbin's, Oakes; also Pine woods, north of Dunbar's, Pringle.

348. Tipularia, Nutt.

T. discolor, Nutt. Brattleboro, Frost. "Vermont, Beck." Doubtful.

349. Calypso, Salisb.

C. borealis, Salisb. Abundant in a few dark, cold cedar swamps, elsewhere very rare. Bristol, Pringle; Peacham, Blanchard; Valcour Island, Torrey.

350. Orchis, L. Orchis.

O. spectabilis, L. Damp woods. Not common.
O. rotundifolia, Pursh. (*Habenaria rotundifolia*, Pursh.) Sphagnous bogs

351. Perularia, Lind.

P. virescens, Gray. (*Habenaria virescens, Spreng*). Wet meadows.

352. Habenaria, Willd.

H. tridentata, Hook. Swamps. Not Common.
H. viridis, R. Br. var. bracteata, Rich. Damp woods.
H. hyperborea, R. Br. Damp, cold woods.
H. dilitata, Gray. Sphagnous swamps. Not common. Peacham, Blanchard.
H. obtusata, Rich. Camel's Hump and cold woods on high mountains.
H. Hookeri, Torr. Rare. Monkton, Pringle; Norwich and Sharon, Morgan.
H. orbiculata, Pursh. Round-leaved Orchis Damp, cold woods. Not Common.

H. ciliaris, R. Br. Reported from Vermont, but very doubtful.
H. blephariglottis. Hook. White Fringed Orchis. Bogs. Not common.
H. lacera, R. Br. Green Fringed Orchis. Bogs.
H. psycodes, Gray. Purple Fringed Orchis. Common. Bogs and Meadows
H. fimbriata, R. Br. Mountain bogs. Rare. Hancock. Brainerd.

353. CYPRIPEDIUM, L. Moccasin Flower. Lady's Slipper.

C. arietinum, R. Br. Ram's head. Rocky woods and cedar. swamps. Rare.
C. parviflorum, Sal. Small Yellow Lady's Slipper. Monkton, Pringle Rutland. Bigelow.
C. pubescens, Willd. Large Yellow Lady's Slipper. Not common.
C. spectabile, Sw. Pink and White Lady's Slipper. Swamps. Common in some places, elsewhere rare.
C. acaule, Ait. Pink Lady's Slipper. Very common in some places. Swamps and pine woods.

IRIDACEÆ.

354. IRIS, L. Blue Flag.

I. versicolor, L. Common.

355. SISYRINCHIUM, L. Blue eyed Grass.

S. anceps, Car.* (*S. Bermudiana, L. pars.*) Common.
S. mucronatum, MX. (*S. Bermudiana, L.* var. *Mucronatum.* Gray.)
S. albidum, Raf.

AMARYLLIDACEÆ.

356. HYPOXIS, L.

H. erecta, L. Southern part of the State.

SMILACEÆ.

357. SMILAX, Tourn.

S. rotundifolia, L. Thickets. Not common.
S. herbacea, L. By streams. Middlebury. Brainerd.

LILIACEÆ.

358. ALLIUM, L. Garlic. Leek.

A. Schœnoprasum, L. Woods. Not common.

*W. B. Hemsley (Jour. Bot. XXII., p. 108, reprinted Am. Naturalist, Vol. XVIII., 423) unites all under *S. angustifolium.*

A. tricoccum, L. "Windsor, Vermont, Leland."

359. Polygonatum, Tourn. Solomon's Seal.

P. biflorum, Ell. Woods.
P. giganteum, Diet. Damp soil. Doubtful.

360. Smilacina, Desf. Solomon's Seal.

S. racemosa, Desf. Rocky woods. Common.
S. stellata, Desf. Common. Swamps.
S. trifolia, Desf. Swamps. Common.

361. Maianthemum, Desf.

M. bifolia, Ker. Very common.

362. Asparagus, L.

A. officinalis, L. Escaped in some places from cultivation.

363. Lilium, L. Lily.

L. Philadelphicum, L. Field Lily. Dry soil. Common.
L. Canadense, L. Meadow Lily. Meadows. Common.

364. Erythronium, L.

E. Americanum, Sm. Adder tongue. Common in low grounds.

365. Uvularia, L. Bellwort.

U. perfoliata, L. Not common.
U. grandiflora, Sm. Not abundant.

366. Oakesia, Wat.

O. sessilifolia, Wats. (*Uvularia sessilifolia L.*) Very common.

367. Streptopus, Mx.

S. amplexifolius, DC. Mountain forests.
S. roseus, Mx. Cold Hemlock woods. Common.

368. Clintonia, Raf.

C. borealis, Raf. Very abundant in mountain forests and cold swamps.

369. Zygadenus, Mx.

Z. glaucus, Nutt. Ferrisburgh, Brainerd.

370. Medeola, Gron.

M. Virginica, L. Woods. Common.

371. Trillium, L.

T. erectum, L. Purple Trillium. Moist woods. Common.
T. erectum, Var. Album, Gray. Not common.
T. grandiflorum, Salis. Large White Trillium. Common.

T. cernuum, L. Wake Robin. Swamps. Not common.
T. erythrocarpum, Mx. Painted Trillium. The most common species along the mountains, but less common on lowlands.

372. Tofieldia, Huds.

T. glutinosa, Huds. "Queechy Gulf, Leland." Rare.

373. Veratrum, Tourn. Hellebore.

V. viride, Ait. Common in damp meadows.

374. Hemerocallis, L. Day Lily.

H. fulva, L. Escaped from cultivation, Pringle.

PONTEDERIACEÆ.

375. Pontederia, L.

P. cordata, L. Ponds. Common.

376. Schollera, Sch.

S. graminea, Willd. Creeks of Lake Champlain.

XYRIDACEÆ.

377. Xyris, L.

X. Caroliniana, Walt. Brattleboro, Frost. Doubtful.

ERIOCAULONACEÆ.

378. Eriocaulon, L. Pipewort.

E. septangulare, With. Borders of ponds.
E. decangulare, L. "Willoughby Lake," Wood.

JUNCACEÆ.

379. Luzula, DC. Wood Rush.

L. pilosa, DC. Mountains.
L. spadicea, DC., var. melanocarpa; Gr. (*L. parviflora var. etc.*)
L. campestris, DC. Woods and fields.
L. spicata, Des. Smuggler's Notch, Pringle. Nearly extinct.

380. Juncus, L. Rush.

J. effusus, L. Wet places. Common.
J. filiformis, L. Summits of higher mountains and Lake Champlain.
J. trifidus, L. Mountain summits.
J. marginatus, Rostk. Sandy river banks.

J. **bufonius**, L. Low grounds.
J. **tenuis**, Willd. Low grounds.
J. **pelocarpus**, Meyer. Shores of ponds.
J. **articulatus**, L. Peacham, Blanchard. Common.
J. **alpinus**, Vill. Var. **insignis**, Fries. Shores of Lake Champlain. Common.
J. **acuminatus**, Mx. Var. **debilis**, Engl.
J. **nodosus**, L. Wet meadows.
J. **Canadensis**, Gray. Var. **longicaudatus**, Gray. Bristol Pringle; Norwich, Blanchard.
J **Canadensis**, var. **brachycephalus**, Gray. New Haven, Brainerd.
J. **Canadensis**, var. **coarctatus**, Engl. Wet places about mountains. Common.

TYPHACEÆ.

381. TYPHA, Tourn. Cat-tail.

T. **latifolia**, L. Swamps. Common.
T. **angustifolia**, L. Ferrisburgh, Pringle.

382. SPARGANIUM, Tourn.

S. **eurycarpum**, Engl. Ditches and ponds.
S. **androcladum**, Engl. (*S. simplex, Huds. var. androcladum, Eng.*) Middlebury, Brainerd.
S. **androcladum**, Engl. var. **fluctuans**, Morong, (*S. Simplex, Huds. var. fluitans, Eng.*) Sterling pond, Pringle; Sugar Hill Pond, Wallingford, Brainerd.
S. **simplex**, Huds. Middlebury, Diadema Island, Lake Champlain, Brainerd.
S. **simplex**, Huds. var. **augustifolium**, Engl. Sterling Pond, Pringle; Lost Pleiad Pond, Hancock, Brainerd.
S. **minimum**, Bauhin. Barnet, Wardens pond, Blanchard.

ARACEÆ.

383. ARISÆMA, Mart.

A. **triphpyllum**, Torr. Indian Turnip. Woods. Common.
A. **Dracontium**, Schott. Western portion of the State. Not common. Weybridge, Brainerd.

384. PELTANDRA, Raf.

P. **Virginica**, Raf. Middlebury, Brainerd; Bristol pond, Pringle. Not common.

385. CALLA, Linn.

C. **palustris**, Wild Calla. Swamps. Common.

386. SYMPLOCARPUS, Salisb. Skunk Cabbage.

S. **fœtidus**, Salisb. Common in wet places.

387. Acorus, L. Sweet Flag.

A. Calamus, L. Common.

LEMNACEÆ.

388. Lemna, L. Duckweed.

L. trisulca, L. Borders of ponds.
L. minor, L. Still water. Common.

389. Spirodella, Sch.

S. polyrrhiza, Sch. (*Lemna polyrrhiza, L.*)

ALISMACEÆ.

390. Scheuchzeria, L.

S. palustris, L. Bristol Bog, Pringle; Snake Mountain Bog, Brainerd,

391. Alisma, Linn.

A. plantago, L. Water Plantain. Common.

392. Sagittaria, L.

S. variabilis, Engl. Very common.
S. heterophylla. Mouth of Mississquoi River; Pringle.
S. heterophylla, Pursh. Var. elliptica, Gray. Dead Creek, Ferrisburgh.
S. graminea, Mx. Mouth of Mississquoi River, Pringle.
S. natans, Mx. Brattleboro, Frost. (Doubtful.)
S. lancifolia, L. Grows in Mallets Bay not far north of the hotel, near the road to Colchester, Perkins. Not before reported north of Virginia.

NAIADAC Æ.

393. Naias, L.

N. flexilis, Rost. Sluggish streams and ponds.

394. Zannichellia, Mich.

Z. palustris, L. North Hero, Brainerd and Pringle; Norwich, Jessup; Long Pond, Danville, Blanchard.

395. Potamogeton, Tourn.

P. natans, L. Ponds. Common.
P. Pennsylvanicus, Cham. (*P. Claytonii*, Tuck.) Dead Creek, Ferrisburgh, Pringle and elsewhere. Common.
P. Vaseyi, Robbin's. Barnet, Blanchard. Rare.
P. Spirillus, Tuck. Brattleboro, Frost.
P. hybridus, Mx. Lake Champlain, Windsor and Willoughby. Jessup.

P. alpinus, Ball. (P. *rufescens*, Schr.) Windsor, Willoughby. Jessup. Barnet, Blanchard.
P. pulcher, Tuck. Brattleboro, Frost.
P. lonchites, Tuck. Pringle. Common.
P. amplifolius, Tuck. Ferrisburgh, Pringle. Barnet, Blanchard.
P. gramineus, L. Rivers and ponds. Common.
P. Zizii, Mer. and Koch. (P. *lucens*, var. *Minor*, Nolt.) Alburgh, Morong.
P. lucens, L. Ponds.
P. prælongus, Wulf. Willoughby Lake, Wood.
P. perfoliatus, L. Ponds. Common.
P. perfoliatus, L. Var. lanceolatus, Robbins. Mouth of Little Otter Creek. Morong.
P. zosterifolius, Sch. (P. *compressus*, L.) Rivers and ponds. Not common.
P. obtusifolius, M. and R. Shelburne Pond, Pringle.
P. pauciflorus, Pursh. Lewis Creek, Ferrisburgh. C. E Faxon.
P. pectinatus, L. Lake Champlain. Connecticut River. Peacham.
P. Robbinsii, Oakes, West Barnet, Blanchard.

(P. Oakesianus, Robbins. Has been found by Prof. Jessup, not far from the Vermont border, and should be found in the State.)

CYPERACEÆ.

396. Cyperus, L.*

C. diandrus, Torr. Var. castaneus, Torr. Borders of ponds.
C. aristatus, Rott. (*C. inflexus*, Muhl.) Sandy river banks.
C. dentatus, Torr. Grand Isle and Shelburn, Pringle.
C. esculentus, L. (*C. phymatodes*, Muhl.) Sandy soil.
C. strigosus. L. Low grounds.
C. setigerus, T. & H. Including *C. lutescens*, T.
C. filiculmis, Vahl. Dry soil.

397. Dulichium, Rich.

D. spathaceum, Pers. Borders of ponds.

398. Eleocharis, R. B.

E. obtusa, Sch. Common, Norwich, Jessup; Peacham, Blanchard.
E. olivacea, Torr. Bristol Pond, Pringle; Abbey Pond Ripton, Brainerd.
E. palustris, R. Br. Common only near the lake.
E. palustris, R. Br. Var glaucescens, Gray. Common.
E. rostellata, Torr. Tuckerman in Gray's Manual.
E. intermedia, Sch. North Pomfret, A. P. Morgan.

*Vide Preliminary List of N. A. species of Cyperus, N. L. Britton, Bullet, Torr. Bot. Club. XIII. 205.

E. tenuis, Sch. Common. Moist meadows.
E. acicularis, Torr. Common.
E. pauciflora, Wats. (*Scirpus pauciflorus*, Light.) Lyndon, Congdon.

399. Scirpus, Linn.

S. planifolius, Muhl. Charlotte, Pringe.
S. pungens, Vahl. Common along Lake Champlain.
S. caespitosus, L. Smuggler's Notch, Pringle.
S. lacustris, L. (*S. validus*, Vahl.) Common.
S. Torreyii, Olney. Fort Cassin, Ferrisburgh, Brainerd.
S. Smithii, Gray. Lake Champlain, Ferrisburgh, Faxon.
S. fluviatilis, Gray. Creeks of Lake Champlain.
S. sylvaticus, L. Var. dygnus, Boech. (*S. microcarpus*, Pres.) Wet meadows. Common.
S. debilis, Pursh. Norwich. Jessup.
S. atrovirens, Mulh. Common.
S. polyphyllus, Vahl.
S. lineatus, Mx. Middlebury, Brainerd.
S. Eriophorum, Mx. Common.
S. Eriophormon, Mx. var. laxus. Gray. Common.

400. Eriophorum, L. Cotton Grass.

E. alpinum, L. Swamps. Mountain bogs.
E. vaginatum, L.
E. Virginicum, L. Swamps.
E. polystachyon, L. (Including vars. *angustifolium and latifolium.*)
E. gracile, Koch. Cool bogs.

401. Fimbristylis, Vahl.

F. autumnalis. R. & S.
F. capillaris, Gray. "Bellows Falls, Casey." Oakes. Snake Mountain, Brainerd.

402. Rhynchospora, Vahl.

R. alba, Vahl. Common in bogs. Union Village, Jessup.
R. capillacea, Torr.
R. glomerata, Vahl. Low grounds. Middlebury, Brainerd.
R. fusca, R. & S. Wells River, Horsford.

403. Cladium, P. Br.

C. mariscoides, Torr. Swamps. Bristol Bog, Pringle; Union Village, Jessup.

404. Scleria, L.

S. triglomerata, Mx. "Vermont." Gray's Manual.

405. Carex, L. Sedge.

C. pauciflora, Light. Swamps. Snake Mountain, Brainerd.
C. folliculata, Linn. Swamps. Burlington. Torrey.

C. **Michauxiana,** Boeck. (*C. rostrata*, Mx.) Sterling Pond. Pringle.
C. **intumescens,** Rud. Woods and Swamps.
C. **Grayii,** Carey. Middlebury, Brainerd.
C. **lurida,** Wahl. (*C. lupulina*, Muhl.) Meadows, etc.
C. **lurida,** Wahl. Var. **polystachya,** Bailey. (C. *lupuliformis*, Sart.)
C. **oligosperma,** Mx. Bogs. Peacham, Blanchard; Burlington, Torrey.
C. **rostrata,** With. (C. *ampullacea*, Good.) Burlington, Torrey.
C. **rostrata,** With. var. **utriculata,** Boott. (C. *utriculata*, Boott.) Meadows and swamps.
C. **monile,** Tuck. Wet places.
C. **Tuckermani,** Boott. Wet Meadows.
C. **retrorsa,** Schro. Swamps and bogs.
C. **tentaculata,** Muhl. Wet places.
C. **tentaculata,** Muhl. Var. **gracilis,** Boott. Mountains.
C. **tentaculatax lurida** North Hero, Morong.
C. **Schweinitzii** Dew. Southern Vermont.
C. **hystricina.** Muhl. Wet fields.
C. **Pseudo-Cyperus,** L. Linn. Wet places.
C. **Pseudo-Cyperus,** L. Boott. var. **comosa,** Boott. (C. *comosa.* Boott.)
C. **Squarrosa,** L. Near Lake Champlain.
C. **Shortiana,** Dew. In Torrey Herb as from Burlington. Doubtful.
C. **Scabrata,** Schw. Swamps.
C. **filiformis,** Lam. Bogs.
C. **filiformis,** L. var. **latifolia,** Boeck. (*C. lanuginosa*, Mx.)
C. **trichocarpa,** Muhl. (*C. striata*, Casey,) Burlington, Torrey.
C. **riparia,** W. Curtis. Borders of streams.
C. **atrata,** L. Smugglers notch, Mt. Mansfield, Pringle, very rare.
C. **Buxbaumii,** Wahl. Burlington, Torrey.
C. **vulgaris,** Fries.
C. **vulgaris,** Fries. var. **hyperborea,** Boott. (C. *rigida.* Good. var. *Bigelovii*, Wahl.) Bristol Bog, Pringle; Burlington, Torrey.
C. **stricta,** Lam. Wet meadows.
C. **stricta,** Lam. var. **decora,** Bailey. (*C. aperta* of Grays, Manual, not of Boott.) Middlebury, Brainerd; Barnet, Blanchard.
C. **lenticularis,** Mx. Shore of Lake Champlain and mountain ponds. Pringle, Brainerd.
C. **torta,** Boott, mountain brooks.
C. **prasina,** Wahl. (*C. miliacea*, Muhl.) Bogs.
C. **crinita,** Lam. Moist banks.
C. **crinita,** Lam. var. **gynandra,** S. & T. (*C. gynandra* Sch.) mountain brooks.
C. **Magellanica,** Lam. (*C. irrigua*, Sm.) Cold bogs. Western Vermont, Mt. Mansfield, Pringle; Norwich, Blanchard.

C. limosa, Lam. Western Vermont, with the last.
C. virescens, Muhl. Borders of woods.
C. triceps, Mx. Western Vermont, not rare.
C. longirostris, Torr. mountains and ledges.
C. flexilis, Rud. Pomfret, Morgan; Barnet, Blanchard; Middlebury, Brainerd.
C. arctata, Boott. Meadows. Common.
C. debilis, Mx. Mountain towns.
C. gracillima, Sch. Meadows and waste ground.
C. formosa, Dew. Middlebury, Brainerd.
C. grisea, Wahl. Low grounds.
C. granularis, Muhl. Meadows and fields.
C. Crawei, Dew. Charlotte, Pringle.
C. flava. L. Meadows. Common.
C. Œderi, Retz. Shores of lakes and river banks.
C. pallescens, L. Meadows. Common.
C. conoidea, Sch, In grassy fields. Common.
C. oligocarpa, Schk. Abundant.
C. Hitchcockiana, Dew. Pomfret, Morgan; Middlebury, Brainerd.
C. laxiflora, Lam. (doubtful.)
C. laxiflora, Lam. var. patulifolia, Car. (*C. plantaginea*, Sch.)
C. laxiflora, var. intermedia, Boott. Charlotte, Pringle.
C. laxiflora, var. striatula, Carey. (*C. blanda*, Dew.)
C. laxiflora, var. latifolia, Boott. Moist woods.
C. retrocurva, Dew. Charlotte, Pringle.
C. digitalis, Willd. Middlebury, Brainerd.
C. platyphylla, Carey. Thick groves and woods.
C. plantaginea, Lam. Rocky woods. Common.
C. vaginata, Tausch. Cedar swamps. Sutton, Pringle. Rare.
C. tetanica, Schk. var. Meadii, Bailey. Torrey Herb. Burlington.
C. livida, Willd, Bristol bog. Pringle. Very rare.
C. aurea, Nutt. Meadows.
C. eburnea, Boott. Shaded limestone ledges.
C. pedunculata, Muhl. Dry woods. Common.
C. scirpoidea, Mx. Mt. Mansfield, Pringle. Willoughby, Mt.
C. Pennsylvanica, Lam. Dry woods.
C. varia, Muhl. Wooded hills
C. Emmonsii, Dew. Hillsides.
C. Novæ-Angliæ, Sch. Moist Mountain forests.
C. umbellata, Sch. Dry sandy woods.
C. pubescens, Muhl. Barnet, Blanchard, Western Vermont.
C. Backii, Boott. Western Vermont. Not rare.
C. polytrichoides, Muhl. Wet woods.
C. chordorhiza, Ehr. Bristol bog, Pringle Eastern Vermont. Conydon.
C. stipata, Muhl. Meadows.
C. teretiuscula, Good. Bogs.

C. **vulpinoides**, Mx. Moist fields.
C. **telelea**, Schk. Cold cedar swamps.
C. **rosea**, Schk. Woods. Common.
C. **rosea**, Schk. var. **radiata**, Dew. Chipman Hill. Middlebury, Brainerd.
C. **rosea**, var. **retroflexa**, Torr. (*C. retroflexa*, Muhl.) Burlington, Torrey.
C. **sparganoides**, Muhl. Moist banks.
C. **cephalophora**, Muhl. wooded hillside, Western Vt.
C. **gynocrates**, Worm. (*C. dioica*, Torr.) Burlington, Torrey.
C. **exilis**, Dow. Bristol Bog, Pringle.
C. **echinata**, Murray. (*C. stellulata* Wood.)
C. **echinata**, Mur. Var. **microstachys**, Boeck. (*C. sterilis.* Willd.)
C. **canescens**, L. Swamps.
C. **canescens**, L. var. **vulgaris**, Bailey. (C. *vitilis* of Gray's Manual, in part). Common on mountains.
C. **canescens**, L. var. **polystachya**, Booth. (*C. arcta*, Boott.) Swamps along Northern Lake Champlain.
C. **trisperma**, Dew. Cold bogs, Bristol, Pringle; Peacham, Blanchard.
C. **tenuiflora**, Wahl. Occurs with the last.
C. **bromoides**, Schk. Moist woods and swamps.
C. **Deweyana**, Schw. Warm, open woods.
C. **siccata**, Dew. Lake shore, north of Burlington, Brainerd, Torrey.
C. **tribuloides**, Wahl. (*C. lagopodiodes*, Schk.) Wet meadows.
C. **tribuloides**, Wahl. var. **cristata**, Bailey. (*C. cristata*, Schk.)
C. **tribuloides**, Wahl. Var. **reducta**, Bailey. North Hero, Morong; Ripton, Brainerd.
C. **scoparia**, Schk. Wet ground.
C. **adusta**, Boott. Fairlee, Blanchard; Middlebury, Brainerd.
C. **straminea**, Schk. Low grounds.

GRAMINEÆ.

406. Paspalum, L.

P. **setaceum**, Mx. Dry fields.

407. Panicum, L.

P. **amarum**, Ell. Sandy shores of Connecticut River, Brattleboro, Barrett, Robbins, Pringle.
P. **capillare**, L. Gardens and fields.
P. **clandestinum**, L. Woods.
P. **crus galli**, L. Barnyard grass. Cultivated grounds.
P. **depauperatum**, Muhl. Several varieties also occur.
P. **dichotomum**, L. Low ground.
P. **glabrum**, Gaud. Cultivated ground.
P. **latifolium**, M. Sandy soil in the shade.

P. SANGUINALE, L. Cultivated grounds.
P. virgatum, L. Lake shore, Ferrisburgh, Pringle.
P. xanthophysum, Gray.

408. SETARIA, Beauv.

S. GLAUCA, Beauv. Fox-tail grass. Cultivated ground.
S. ITALICA, Kth. Hungarian Grass. Roadsides and fields
S. VIRIDIS, Beauv. Bottle grass. Cultivated ground.

409. CENCHRUS, L. Burr Grass.

C. tribuloides, L. Sandy soil.

410. SPARTINA, Schreb.

S. cynosuroides, Willd. Willd. River banks. Shore of Lake Champlain.

411. ZIZANIA, Gron. Wild Rice.

Z. aquatica, L. Edges of ponds and streams.

412. LEERSIA, Sol.

L. Virginica, Sm. Damp woods.
L. oryzoides, Sw. Ditches and streams.

413. ANDROPOGON, L.

A. provincialis, Lam. (*A. furcatus*, Muhl.) Dry, rocky soil.
A. scoparius, Mx.

414. CHRYSOPOGON, Trin.

C. nutans, Benth. (*Sorghum nutans*, Gray.) Dry fields.

415. PHALARIS, L. Canary grass.

P. arundinacea, L. Wet ground.
P. arundincea, var. picta. Ribbon Grass. Striped Grass.
P. CANARIENSIS, L. Pastures and fields.

416. ANTHOXANTHUM, L. Sweet Grass.

A. ODORATUM, L. Fields.

417. HIE HLO A, Gmel.

H. alpina, R. & S. Summit of Mt. Mansfield, Pringle.
H. borealis, R. & S. Shores of Lake Champlain, Pringle.

418. ALOPECURUS, L. Foxtail Grass.

A. GENICULATUS, L.
A. GENICULATUS, Var. aristulatus, Mx. (*A. aristulatus*, Mx.) Monkton, Pringle; Middlebury, Brainerd.
A. PRATENSIS, L. Moist ground.

419. ARISTIDA, L.

A. dichotoma, Mx. Barren soil.

420. Oryzopsis, Mx.

O. melanocarpa, Muhl. Rocky Roads.
O. Canadensis, Torr. Warm Woods.
O. asperifolia, Mx. Wooded hillsides.

421. Milium.

M. effusum, L. Moist, cool woods.

422. Muhlenbergia, Schr.

M. sobolifera, Trin. Rocky hills and open woods.
M. glomerata, Trin. Swamps.
M. Mexicana, Trin. Damp ground.
M. sylvatica, T & G. Woods.
M. Willdenovii, Trin. Rocky woods.
M. diffusa, Schr. Charlotte, Pringle; Middlebury, Brainerd.

423. Brachyelytrum, Beauv.

B. aristatum, Beauv. Woods

424. Phleum L.

P. pratense, L. Timothy. Herds Grass. Common.

425. Sporobolus, R. Br.

S. serotinus, Gray. Mountain Bogs. Ripton, Boyce; Bakersfield, Pringle; Peacham, Blanchard.
S. aspera, Kth. (*Vilfa aspera*, Beauv.) Lake shore.
S. vaginæflorus, Vasey. (*Vilfa vaginæflora* Tor.) Common in dry, warm soil.

426. Agrostis, L. Bent Grass.

A. perennans, Tuck. Damp, shaded places.
A. scabra, Willd. Dry soil Clefts of rocks, etc.
A. canina, L. Var. alpina, Oakes. Bare mountain summits.
A. vulgaris, With. Meadows and fields.
A. vulgaris, With. Var. alba, (*A. alba* L.) Meadows.

427. Cinna, L.

C. arundinacea, L. Wet woods.
C. pendula, Trin. (*C. arundinacea var pendula*, Gray.) Mountain woods.

428. Deyeuxia, Cl. (Calamagrostis in part).

D. Canadensis, Beauv. (*Calamagrostis Canadensis*, B.) Blue-joint Grass. Wet fields.
D. neglecta, Kith. (C. *stricta*, Trin.) Mt. Mansfield Pringle.
D. Nuttalliana, St. (C. *Nuttalliana*, S.) "Windsor Leland." Jessup.

429. Ammophila, Hast.

A. arundinacea, Hast. (*Calamagrostis arenaria*, Roth.) Sandy beaches of Lake Champlain, Alburgh, Pringle.

430. Deschampsia, Beauv. (Aira.)

D. flexuosa, Var. (*Aira flexuosa*, L.) Dry woods.
D. cæspitosa, Beauv. (*Aira cæspitosa*, L.) River banks.
D. atropurpurea, Wahl. (*Aira atropurpurea*, L.) Mt. Mansfield, Torrey.

431. Holcus, L. Velvet grass.

H. lanatus, L. Meadows.

432. Graphephorum, Desv.

G. melicoides, Beauv. Banks of Winooski River, Williston, Pringle.

433. Trisetum, Pers.

T. subspicatum, Beauv. Var. molle. Gray. Lake shore, Pringle: Snake Mountain, Brainerd.

434. Avena, L. Oat.

A. striata, Mx. Rocky soil, in the shade.

435. Arrhenatherum, Beauv.

A. avenaceum, Beauv. Charlotte, Hosford.

436. Danthonia, D. C.

D. compressa, Aux. Dry, gravelly river banks. Waterbury and Charlotte, Pringle.
D. spicata, Beauv. Dry fields and woods. Very common and a great pest.

437. Triodia, R. Br.

T. seslerioides, Vasey. (*Tricuspis seslerioides, Torr.*) Doubtful.

438. Phragmites. Trin.

P. communis, Trin. Reed grass. Borders of ponds.

439. Kœleria, Pers.

K. cristata, Pers. Dry hillsides. Burlington.

440. Eatonia, Raf.

E. Pennsylvanica, Gray. Moist places.

441. Eragrostis, Beauv.

E. reptans, Nees. River banks
E. capillaris, Nees. Sandy soil.
E. pectinacea, Gray. Lake shore. Burlington.

442. Dactylis, L. Orchard Grass.

D. glomerata, L. Fields.

443. Briza, L.

B. media, L. Quaking Grass.

444. Poa. Meadow Grass.

P. annua, L. Cultured fields.
P. compressa, L. Wire grass. Sterile soil.
P. laxa, Hæn. Summits of higher mountains.
P. caesia, Sm. Thetford, Blanchard. Headlands of Lake Champlain.
P. serotina, Ehrh. Meadow grass.
P. pratensis, L. Meadow grass. June grass.
P. trivialis, L. Meadows.
P. debilis, Torr. Common. Warm Woods.
P. alsodes, Gray. Spear grass. Moist woods.

445. Glyceria.

G. Canadensis, Trin. Low lands.
G. obtusa, Trin. Wet fields. Southern Vermont. Doubtful.
G. elongata, Trin. Damp woods.
G. nervata, Trin. Meadows.
G. pallida, Trin. Shallow waters.
G. arundinacea, Kth. (*G. aquatica*, Sen.) Wet places.
G. fluitans, R. Br. Sluggish streams.

446. Festuca, L.

F. tenella, Willd. Sandy soil.
F. ovina, L. Fields.
F. duriuscula, Gray. Dry fields.
F. elatior, L. Fields.
F. nutans, Willd. Rocky woods.

447. Bromus, L.

B. secalinus, L. Chess, Cheat. Cultivated fields.
B. racemosus, L.
B. mollis, L.
B. Kalmii, Gray. Dry soil.
B. ciliatus, L. Woods.
B. erectus, Huds. L. Woods.

448. Lolium, L.

L. perenne, L. Rye grass, Darnel. Willoughby Lake.

449. Agropyrum, Beauv.

A. repens, Beauv. (*Triticum repens*, L.) Couch grass, Witch grass. Very common.
A. caninum, R. & S. (*T. caninum*, L.) Barnet, Blanchard, Lake Champlain, Pringle.
A. violaceum. (*T. violaceum*, L.) Snake Mountain, Brainerd.

450. Elymus, L. Wild Rye.

E. Virginicus, L. Low Ground.
E. Canadensis, L. Rocky banks of streams.
E. striatus, Willd. Dry, rocky soil.

451. Asprella, Willd. (*Gymnostichum*, Sch.)

A. Hystrix, Willd. Hedgehog grass. Rocky woods.

GYMNOSPERMÆ.

CONIFERÆ.

452. Thuya, Tourn. Cedar.

T. occidentalis, L. White Cedar, Arbor Vitæ. Very common

453. Juniperus, L.

J. communis, L. Juniper. Common.
J. Virginiana, L. Red Cedar. Not very abundant.
J. sabina, L. Var. procumbens, Pursh. "Rutland, Mrs. J. Carr." Append., Thompson's, Vermont. Doubtful.

454. Taxus, Tourn. Yew.

T. Canadensis, Willd. (*T. baccata*, L. Var. *Canadensis*, Gray.) American Yew. Cold, damp woods. Not common.

455. Pinus, Tourn. Pine.

P. Strobus, L. White Pine. Common.
P. resinosa, Ait. Red Pine, Norway Pine. Not as common as first and third, but not rare.
P. rigida, Miller. Pitch Pine, Yellow Pine. Very common on sand plains.
P. Banksiana, Lamb. Gray Pine. Found only in Monkton, R. Robinson.

456. Picea, Link.

P. nigra, Link. (*Abies nigra*, Poir.) Black Spruce. The common spruce of the Green Mountains. Very abundant.
P. alba, Link. (*Abies alba*, Mx.) White Spruce. Not found west of the Green Mountains, but common in Northeastern Vermont.

457. Tsuga, Endl.

T. Canadensis, Car. (*Abies Canadensis*, Mx.) Hemlock. Common, especially in mountain forests.

458. Abies, Tourn.

A. balsamea, Mar. Balsam Fir. Mountains and swamps. Not very common.

459. Larix, Tourn. Larch. Hackmatack.

L. Americana, Mx. Swamps. Common.

PTERIDOPHYTA.

EQUISETACEÆ.

460. Equisetum, L. Horse tail, Scouring Rush.

E. arvense, L. Damp fields and pastures.
E. sylvaticum, Damp woods.
E. palustre, L. Shore of Lake Champlain, Pringle.
E. limosum, Shallow water, border of ponds.
E. littorale, Knight's Island, Lake Champlain and shore of Lake Champlain at Ferrisburg, Pringle; Islands in Ball's Bay, Brainerd.
E. hiemale, L. Moist banks.
E. variegatum, Sch. Shore of Lake Champlain and Connecticut river.
E. scirpoides, Mx. Hemlock woods.

OPHIOGLOSSACEÆ.

461. Ophioglossum, L.

O. vulgatum, L. Meadows. Not common.

462. Botrychium, Sw.

B. simplex, Hitch. Dry fields. Pringle. Abundantly scattered over Vermont, its habitat usually poor, cool soil, especially knolls of hill pastures," Pringle.
B. matricariæfolium, Al. Br. "Similarly scattered and abundant in cool, damp soil of woodlands and open fields from the sandy plains by the lake to the very mountain summits." Pringle.
B. ternatum, Sw. Pastures and hillsides throughout the State.
B. ternatum, Sw. var. obliquum, Mill. Hills, "cool sandy soil of open fields." Pringle.
B. ternatum, Sw. var. dissectum, Mill. Found in similar localities as the last.
B. lanceolatum, Angs. Not common, cool woods.
B. Virginianum, Sw. Woods throughout the State.

FILICES.

463. Polypodium, L.

P. vulgare, L. Common on damp, shaded cliffs and rocks.

464. Adiantum, L. Maiden hair Fern.

A. pedatum, L. Common in damp woods and hillsides.

465. Pteris, L.

P. aquilina, L. Common in fields and open woods.

466. Pellæa, Link.

P. gracilis, Hook. Wet cliffs in various localities.
P. atropurpurea, L. Limestone cliffs. Not common.

467. Wocdwardia, Smith.

W. Virginica, Sm. Pond in Colchester. Rare.

468. Asplenium, L.

A. Trichomanes, L. Common on cliffs of limestone rock.
A. ebeneum, Ait. Less abundant than the last; in damp, rocky soil.
A. viride, Huds. Mt. Mansfield, Pringle; Sterling Mountain, Perkins.
A. angustifolium, Mx. Not common. Damp woods.
A. Ruta-muraria, L. Not common. Limestone cliffs.
A. thelypteroides, Mx. Woods. Not common.
A. filix fœmina, Bern. Our most abundant species.

469. Camptosorus, Link. Walking Fern.

C. rhizophyllus, Link. Common on rocks in Western Vermont.

470. Phegopteris, Fée.

P. polypodioides, Fèe. Common. Woods and shaded banks.
P. hexagonoptera, Fée. Not common. Woods.
P. Dryopteris, Fée. Common. Open woods. Swamps.

471. Aspidium, Sw.

A. acrostichoides, Sw. Dry woods. Common.
A. aculeatum, Sw. Var. Braunii. Koch. Abundant by some mountain brooks.
A. Noveboracense, Sw. Common, especially in mountain forests.
A. Thelypteris, Sw. Very common in swampy fields.
A. fragrans, Sw. Mt. Mansfield and Camel's Hump, Pringle.
A. cristatum, Sw. Not rare, woods and damp banks.
A. cristatum, Sw. Var. Clintonianum, Eaton. Swamps. Common.
A. Goldianum, Hook. Damp, rich woods, not comm . a.
A. marginale, Sw. Common.
A. spinulosum, Sw. Common. Swamps.
A. spinulosum, var. intermedium, Willd. Woods. Common.

A. spinulosum, var. dilitatum, Gray. Moist woods on mountains, near the summits.
A. Boottii, Gray. Woods, not very common.

472. Cystopteris, Bern.

C. bulbifera, Bern. Shaded ravines. Not common generally.
C. fragilis, Bern. Rocky woods. Very common.

473. Onoclea, L.

O. sensibilis, L. Common in meadows and damp places.
O. Struthiopteris, Hosf. (*Struthiopteris Germanica*, W.) Common along streams and in wet places.

474. Woodsia, R. Br.

W. Ilvensis, R. Br. On rocks. Common.
W. hyperborea, R. Br. Mansfield and Willoughby Mts. Pringle. Very rare.
W. glabella, R. Br. Willoughby Mt. Wood; Mansfield and Bakersfield ledge, Pringle; Sterling Mt., Perkins, Bates.
W. obtusa. Torr. Rocky hillsides.

475. Dicksonia, L'Her.

D. pilosiuscula, Will. (D. *punctilobula*, K.) Common in moist woods.

476. Osmunda, L.

O. regalis, L. Swamps. Common.
O. Claytoniana, L. Common.
O. cinnamomea, L. Pastures. Common.

LYCOPODIACEÆ.

477. Lycopodium. Ground Pine. Running Pine.

L. Selago, L. Mountain summits.
L. innundatum, L. Sterling Pond, Pringle; Ripton and Wallingford, and elsewhere, Brainerd.
L. lucidulum, Mx. Mountain forests. Common.
L. annotinum, L. Woods.
L. dendroidum, Mx. Woods. Common.
L. clavatum, L. Dry woods. Common.
L. complanatum, L. Woods. Common.

SELAGINELLACEÆ.

478. Selaginella, Beauv.

S. rupestris, Sp. Dry rocks. Common.
S. apus, Sp. Damp ground. Not common.

ISOETACEÆ.

479. Isoetes, L.

I. **echinospora**, Braun. Shallow ponds.
I. **echinospora**, Dur. Var. **Braunii**, Eng. Lake of the Clouds, Mt. Mansfield. Peacham, Blanchard.
I. **echinospora**, Dur. Var. **robusta**, Eng. Northern end of Isle La. Motte, Pringle.
I. **ripraia**, Eng. Borders of streams and ponds.
I. **Englemanni**, Braun. Var. **gracilis**, Gray C. C. Frost.

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